

CATALOG

Air-Cooled Self-Contained Units



BY JOHNSON CONTROLS

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INTRODUCTION

Indoor packaged solutions for convenient floor-by-floor installation.

The SKYMARK D-Series Self-Contained Horizontal and Vertical Indoor Air-Conditioning packages from Johnson Controls offer a complete line of unit options for high-rise and single-story building applications.

Johnson Controls' compact, low profile indoor design protects against potential vandalism and weathering and eliminates the need for any unsightly exterior equipment. The compact dimensions allow for easy installation through doorways, hallways and elevators.

Floor-by-floor installation provides independent zone and temperature control, eliminating many of the complications encountered with rooftop equipment. Renovation and restoration projects are simplified where roof load, cooling tower, and construction restrictions can present installation problems.

The SKYMARK D-Series Air-Cooled Self-Contained design by Johnson Controls features high efficiency, quality engineering and dependable operation.

Listings / Certifications



PRODUCT OVERVIEW

Refrigerant

R-410A

Sizes

2 – 20 Tons (7.03 – 70.3 kW)

Models

DSH (Horizontal) 2-8 Tons

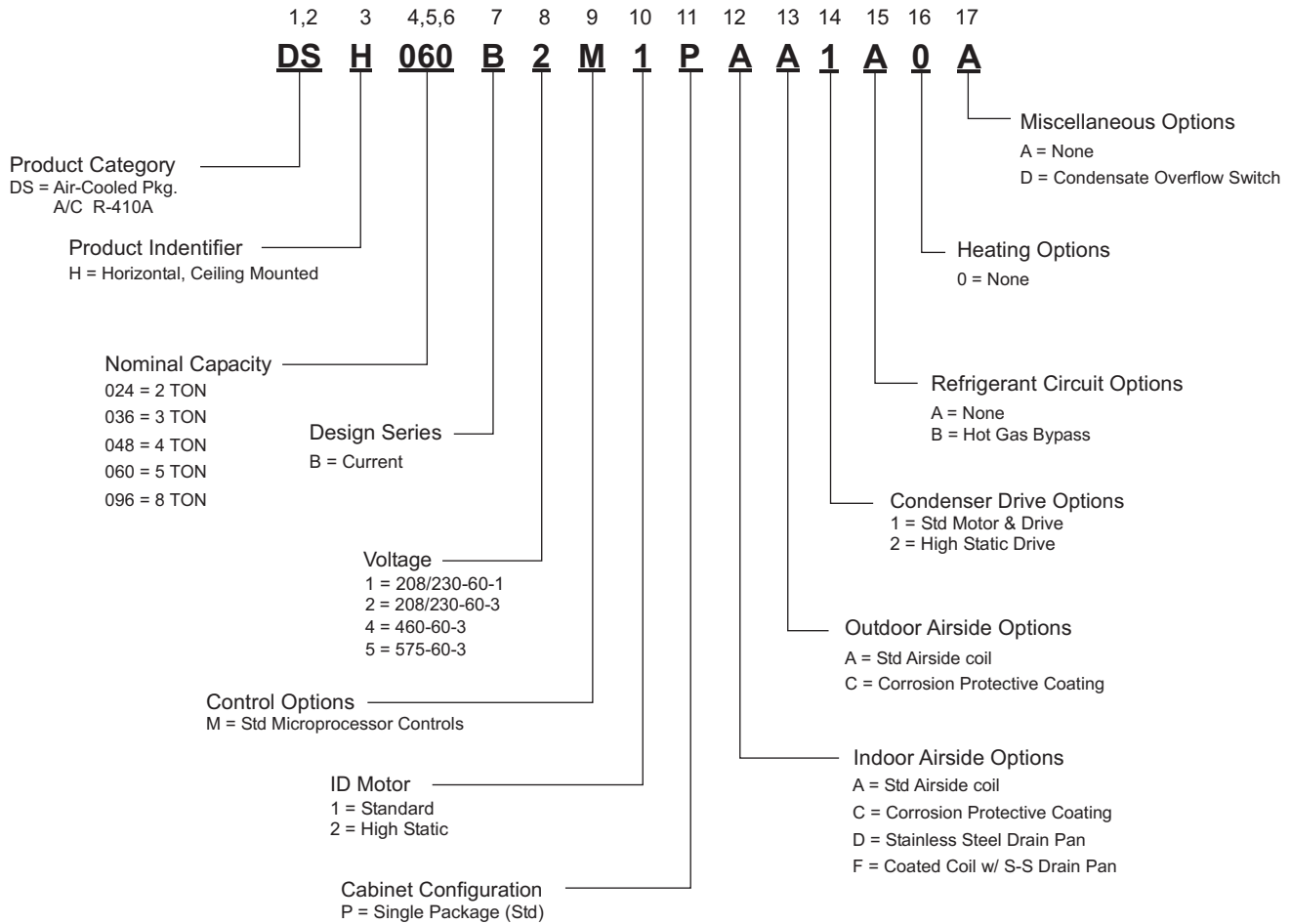
DSV (Vertical) 5-20 Tons

Features

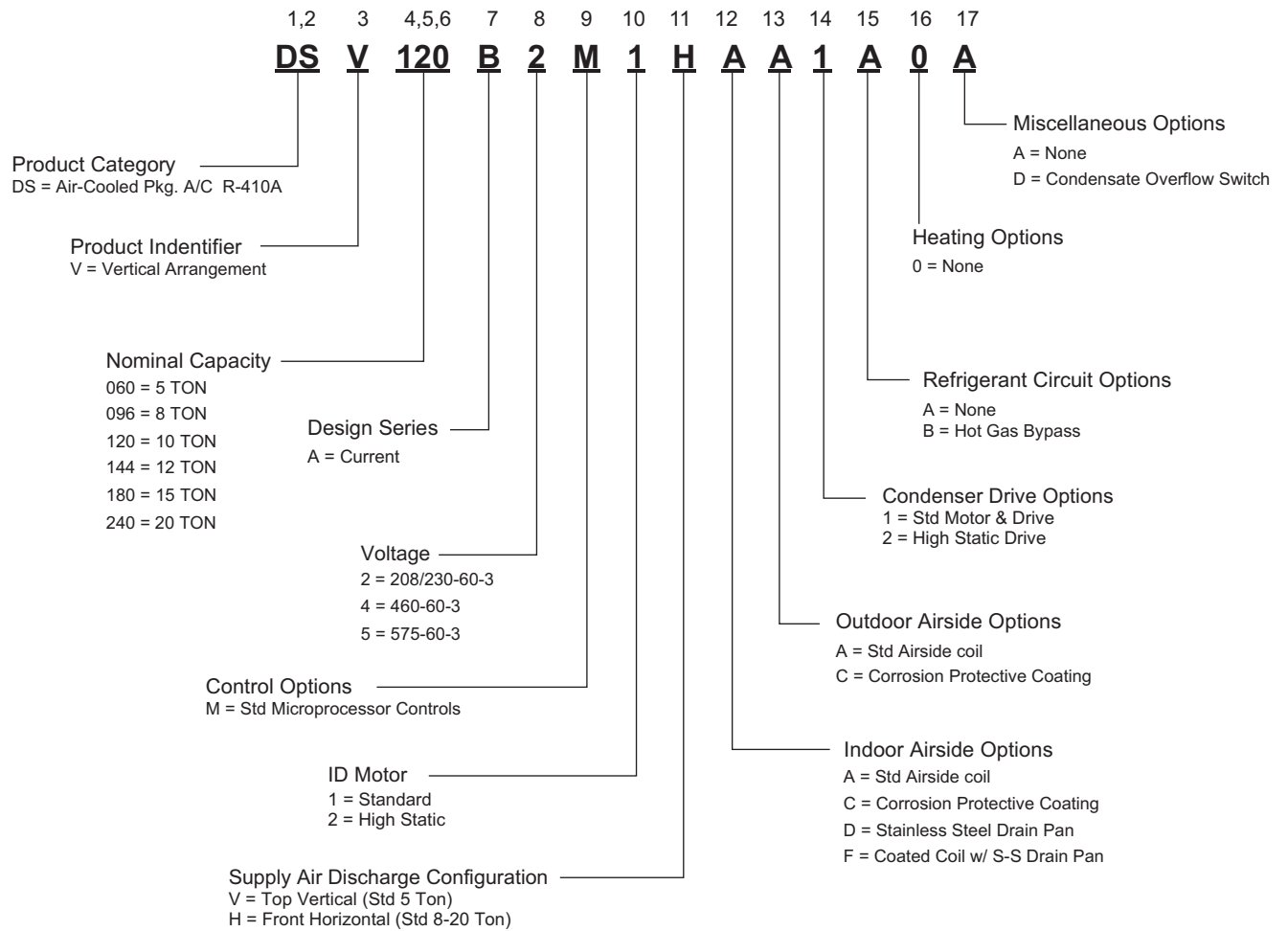
- Ideal for the renovation/retrofit of interior spaces, in both high-rise and low-rise buildings
- Preserves aesthetics of building exterior; the necessity for unsightly exterior equipment is eliminated
- Equipment is protected from extreme weather conditions and vandalism
- Floor-by-floor, or zone-by-zone, installation allows independent metering / temperature control
- Convenient indoor access for all service needs
- Unit casings are constructed of heavy gauge galvanized steel. Cabinet interiors are lined with 1/2 inch thick, 2 lb. density, acoustic insulation
- Separate evaporator and condensing unit modules, allowing field separation if required for ease of ingress / handling in building corridors or elevators.
- Belt driven centrifugal blowers, with adjustable pulleys, are employed for both evaporator and condenser air movement; field adjustment of external static pressure capability to suit a wide range of installation requirements
- High efficiency Scroll compressors
- Each refrigerant circuit complete with schraeder access fittings, sight glass/moisture indicator, filter drier, and thermal expansion valve with external equalizer
- Refrigerant circuit isolation valves, with service ports, allow installation of units as a split evaporator / condensing unit system (DSH models only)
- Dual independent compressor circuits on 8, 10, 12, 15, and 20 ton models
- Microprocessor control with LED status indicator for quick field diagnostics

NOMENCLATURE

Horizontal Unit



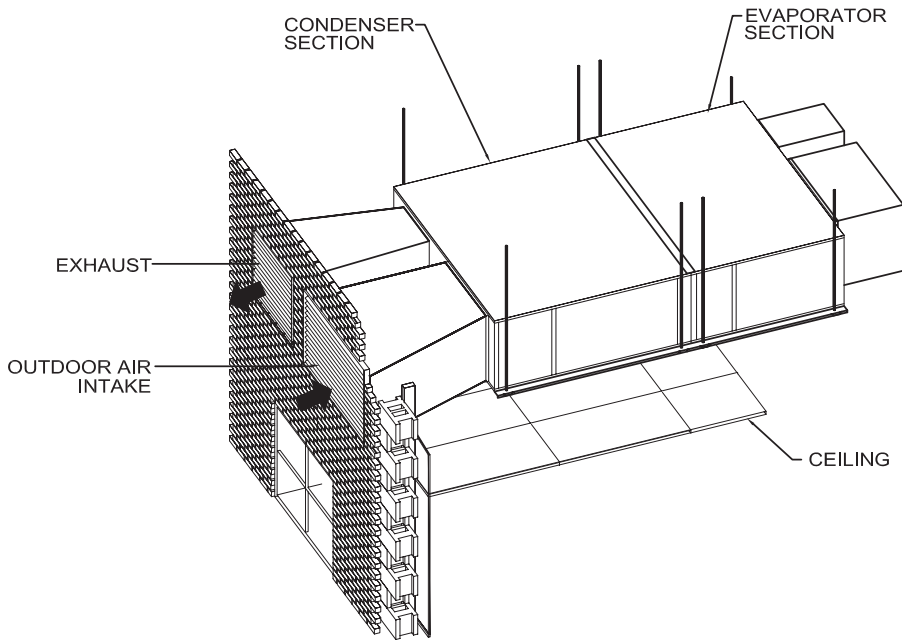
Vertical Unit



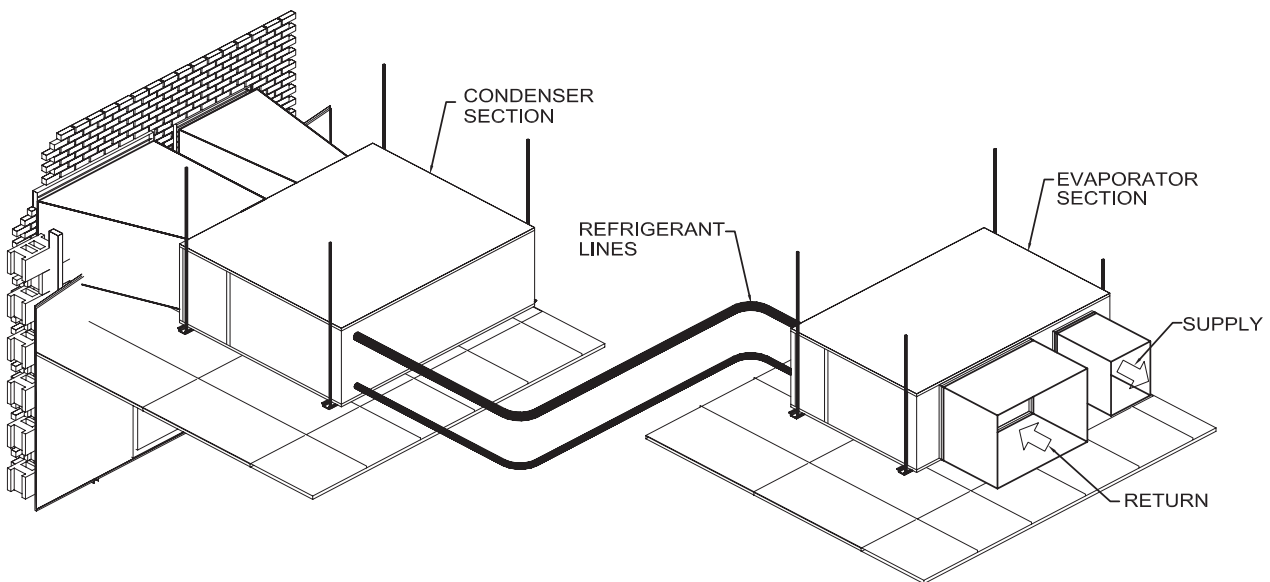
HORIZONTAL APPLICATION & INSTALLATION

2 - 5 Ton Unit

Ductable Ceiling Air Conditioner
Packaged Installation



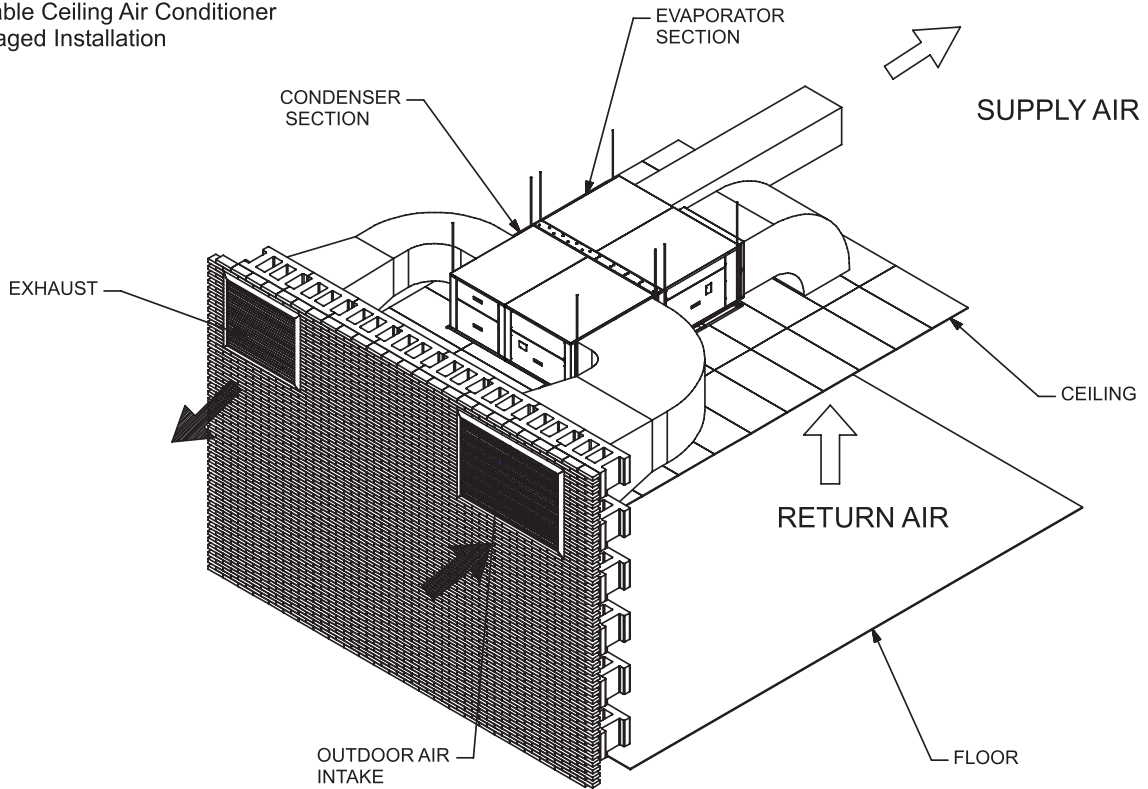
Ductable Ceiling Air Conditioner
Split Installation



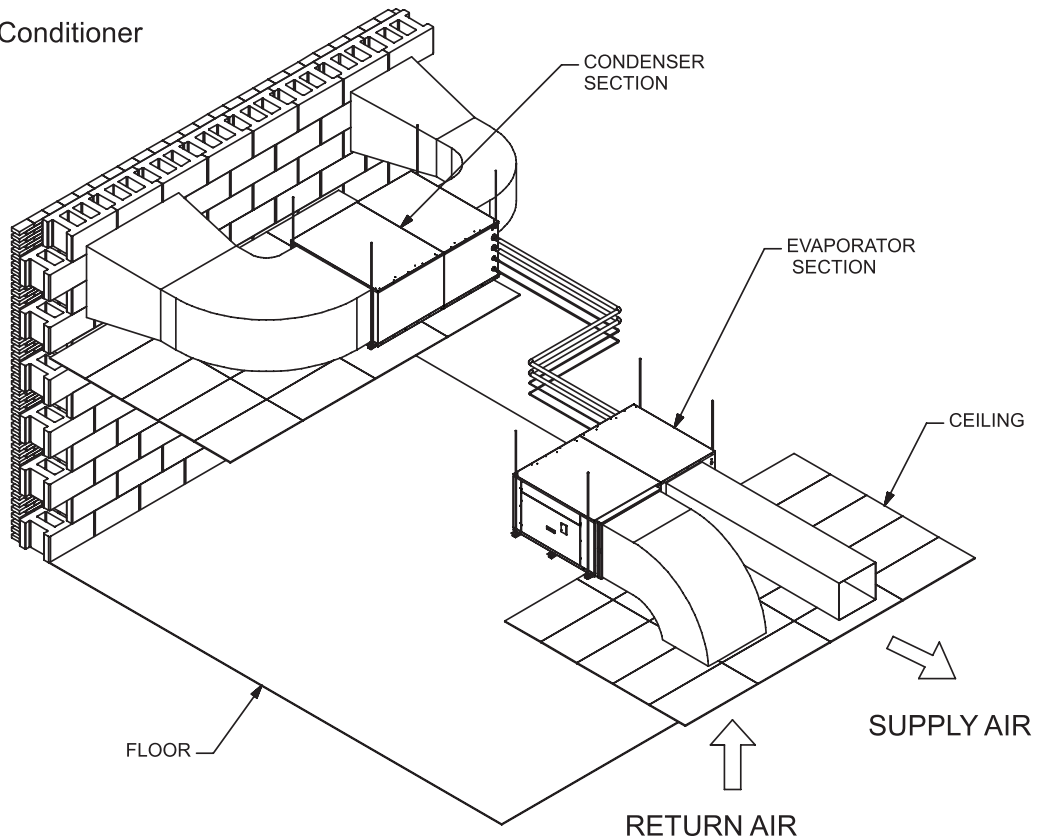
HORIZONTAL

8 Ton Unit

Ductable Ceiling Air Conditioner
Packaged Installation



Ductable Ceiling Air Conditioner
Split Installation



DSH PHYSICAL DATA

HORIZONTAL AIR-COOLED - DSH SERIES R-410A

Model	DSH024B	DSH036B	DSH048B	DSH060B	DSH096B
Nominal Cooling (Tons)	2	3	4	5	8
Refrigerant	R-410A	R-410A	R-410A	R-410A	R-410A

COOLING PERFORMANCE

Gross Cooling Capacity (Btu/h)	26,500	38,500	52,500	62,400	94,000
Net Cooling Capacity, 3PH (1PH) (Btu/h)	25,400 (25,000)	36,800 (36,000)	50,500 (49,500)	59,500	90,000
Design Airflow (CFM)	800	1,200	1,600	2,000	3,200
Net Cooling Airflow (CFM)	800	1,100	1,500	1,800	2,800
SEER, 3PH (1PH)	13.8 (13.0)	13.5 (13.3)	13.8 (13.4)	13.5	11.2
IEER	-	-	-	-	11.4
Compressor - Qty/Type - Model	1/Scroll ZP21K5E	1/Scroll ZP31K5E	1/Scroll ZP42K5E	1/Scroll ZP51K5E	2/Scroll ZP39K5E

EVAPORATOR COIL

Type	Enhanced Copper Tubes, Enhanced Aluminum Fins				
Dimension - Height x Width (in)	24x34	25x34	28x38	28x38	31x52
Face Area (sq ft)	5.66	5.90	7.39	7.39	10.98
Rows/FPI	3/12	4/16	4/16	4/16	4/14
Filters - Quantity/Size (in)	2-25x14x2	2-25x14x2	2-25x16x2	2-25x16x2	4-20x16x2

CONDENSER COIL

Type	Enhanced Copper Tubes, Enhanced Aluminum Fins				
Dimension - Height x Width (in)	25x41	25x41	28x44	28x44	30x78
Face Area (sq ft)	7.12	7.12	8.56	8.56	16.25
Rows/FPI	4/16	4/16	5/16	5/16	3/16

EVAPORATOR FAN

Type	Centrifugal, Forward Curved				
Qty - Diameter x Width (in)	1-10x8	1-10x8	1-12x9	1-12x9	1-15X15
Drive	Adjustable Belt				
Motor HP (Oversized)	0.5	0.75	0.75 (1)	1 (1.5)	1.5 (2)

CONDENSER FAN

Type	Centrifugal, Forward Curved				
Qty - Diameter x Width (in)	1-12X11	1-12x11	1-15x11	1-15x11	1-18X18
Drive	Adjustable Belt				
Motor HP	0.5	0.75	1.5	1.5	3

Dimensions	- Height (in)	26.5	26.5	29.5	29.5	32.0
	- Width (in)	56.0	56.0	64.0	64.0	80.0
	- Depth (in)	78.0	78.0	86.0	86.0	112.0
Weight	- Operating (lbs)	675	680	950	990	1,470
	- Shipping (lbs)	715	720	1,010	1,060	1,560

- Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F wet bulb and CFM listed. Gross capacity does not include the effect of fan motor heat.
- Rated and certified in accordance with ANSI/AHRI Standard 210/240.
- Rated and certified in accordance with ANSI/AHRI Standard 340/360.

DSH PERFORMANCE DATA

DSH024B			SCFM	600			700			800			900			1000		
			EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F
Ambient Condenser Air Temperature	EDB	EWB																
	85°F	57°F	TC	20.5	21.5	22.5	21.4	22.6	23.9	22.3	23.8	25.3	23.2	24.7	26.2	24.2	25.6	27.0
			SC	19.7	21.1	22.5	21.0	22.5	23.9	22.3	23.8	25.3	23.2	24.7	26.2	24.2	25.6	27.0
			KW	1.29	1.29	1.29	1.29	1.29	1.30	1.29	1.30	1.32	1.31	1.32	1.33	1.33	1.33	1.34
		62°F	TC	22.6	23.1	23.6	23.6	24.2	24.8	24.5	25.3	26.0	25.3	26.0	26.8	26.0	26.7	27.4
			SC	16.3	18.3	20.3	17.3	19.6	21.8	18.4	20.9	23.4	19.1	21.9	24.7	20.0	22.9	25.9
			KW	1.31	1.31	1.31	1.32	1.32	1.33	1.33	1.34	1.34	1.35	1.35	1.36	1.36	1.36	1.37
		67°F	TC	24.7	24.7	24.7	25.7	25.7	25.7	26.7	26.7	26.7	27.4	27.4	27.4	27.8	27.8	27.8
			SC	13.6	16.2	18.8	14.3	17.4	20.5	15.1	18.7	22.3	15.8	19.9	24.0	16.6	21.1	25.6
			KW	1.33	1.33	1.33	1.35	1.35	1.35	1.37	1.37	1.37	1.38	1.38	1.38	1.39	1.39	1.39
	72°F	TC	27.1	27.1	27.1	28.1	28.1	28.1	29.1	29.1	29.1	30.7	30.7	30.7	30.0	30.0	30.0	
		SC	12.0	14.0	16.0	12.5	14.5	17.2	12.9	15.1	18.4	13.7	16.6	19.5	13.6	16.6	20.6	
		KW	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.43	1.43	1.43	1.54	1.54	1.54	
	95°F	57°F	TC	19.7	20.8	21.9	21.1	22.2	23.4	22.5	23.7	24.9	23.4	24.5	25.6	23.3	24.8	26.3
			SC	19.3	20.6	21.9	20.9	22.1	23.4	22.5	23.7	24.9	23.4	24.5	25.6	23.3	24.8	26.3
			KW	1.53	1.53	1.53	1.54	1.54	1.54	1.54	1.54	1.54	1.55	1.55	1.55	1.55	1.56	1.56
		62°F	TC	22.0	22.6	23.2	23.3	23.9	24.4	24.5	25.1	25.7	25.2	25.8	26.3	25.2	26.0	26.8
			SC	16.1	18.0	19.9	17.2	19.4	21.6	18.4	20.8	23.2	19.9	21.8	24.3	20.4	22.4	25.4
			KW	1.54	1.54	1.55	1.56	1.56	1.56	1.57	1.57	1.57	1.58	1.58	1.59	1.60	1.60	1.60
		67°F	TC	24.4	24.4	24.4	25.5	25.5	25.5	26.5	26.5	26.5	27.0	27.0	27.0	27.2	27.2	27.2
			SC	13.5	16.1	18.7	14.2	17.3	20.4	15.0	18.6	22.2	15.7	19.6	23.8	16.3	20.8	25.2
			KW	1.55	1.55	1.55	1.57	1.57	1.57	1.60	1.60	1.60	1.61	1.61	1.61	1.66	1.66	1.66
	72°F	TC	26.7	26.7	26.7	27.2	27.2	27.2	27.6	27.6	27.6	29.1	29.1	29.1	29.5	29.5	29.5	
		SC	12.2	14.3	15.8	13.0	14.7	16.8	13.6	15.0	17.6	14.5	16.5	18.6	15.1	17.1	20.3	
		KW	1.59	1.59	1.59	1.59	1.59	1.59	1.60	1.60	1.60	1.61	1.61	1.61	1.69	1.69	1.69	
	105°F	57°F	TC	18.8	20.1	21.3	20.7	21.8	22.9	22.6	23.6	24.6	23.6	24.3	25.0	22.3	24.0	25.7
			SC	18.8	20.1	21.3	20.7	21.8	22.9	22.6	23.6	24.6	23.6	24.3	25.0	22.3	24.0	25.7
			KW	1.76	1.76	1.77	1.77	1.77	1.77	1.78	1.78	1.78	1.79	1.79	1.79	1.80	1.81	1.82
		62°F	TC	21.5	22.1	22.7	23.0	23.5	24.1	24.4	24.9	25.4	25.2	25.5	25.8	24.5	25.3	26.2
			SC	15.8	17.7	19.6	17.1	19.2	21.3	18.4	20.7	23.0	19.8	21.6	23.9	19.7	21.8	24.9
			KW	1.76	1.76	1.77	1.77	1.78	1.79	1.79	1.81	1.81	1.82	1.82	1.83	1.85	1.86	1.87
		67°F	TC	24.2	24.2	24.2	25.2	25.2	25.2	26.3	26.3	26.3	26.7	26.7	26.7	27.0	27.0	27.0
			SC	13.4	16.0	18.6	14.1	17.2	20.4	14.9	18.5	22.1	15.4	19.5	23.7	16.0	20.5	24.9
			KW	1.76	1.76	1.76	1.77	1.77	1.77	1.82	1.82	1.82	1.86	1.86	1.86	1.94	1.94	1.94
	72°F	TC	26.3	26.3	26.3	26.2	26.2	26.2	26.1	26.1	26.1	27.5	27.5	27.5	28.0	28.0	28.0	
		SC	13.8	14.7	15.6	13.8	15.2	16.3	14.0	15.4	16.7	15.0	15.8	17.9	15.6	16.7	19.4	
		KW	1.76	1.76	1.76	1.77	1.77	1.77	1.82	1.82	1.82	1.86	1.86	1.86	1.95	1.95	1.95	
	115°F	57°F	TC	18.0	19.3	20.7	20.4	21.4	22.5	22.8	23.5	24.3	23.8	24.1	24.3	21.4	23.2	25.0
			SC	18.4	19.5	20.7	20.6	21.5	22.5	22.8	23.5	24.3	23.8	24.1	24.3	21.4	23.2	25.0
			KW	1.97	1.98	1.99	1.99	2.00	2.01	2.01	2.02	2.02	2.03	2.04	2.04	2.05	2.06	2.06
		62°F	TC	21.0	21.7	22.3	22.7	23.2	23.7	24.4	24.8	25.1	25.1	25.2	25.4	23.8	24.7	25.5
			SC	15.5	17.4	19.3	17.0	19.0	21.0	18.4	20.6	22.8	19.0	21.4	23.3	18.2	21.3	24.4
			KW	1.95	1.96	1.97	2.00	2.01	2.01	2.02	2.03	2.04	2.05	2.07	2.08	2.11	2.12	2.14
		67°F	TC	24.0	24.0	24.0	25.0	25.0	25.0	25.6	25.6	25.6	26.1	26.1	26.1	26.4	26.4	26.4
			SC	13.3	15.9	18.5	14.0	17.1	20.3	14.7	18.4	22.1	15.0	19.3	23.5	15.8	20.1	24.5
			KW	1.94	1.94	1.94	1.97	1.98	1.98	2.03	2.03	2.03	2.11	2.11	2.11	2.23	2.23	2.23
	72°F	TC	25.2	25.2	25.2	25.6	25.6	25.6	25.9	25.9	25.9	26.4	26.4	26.4	26.6	26.6	26.6	
SC		11.6	13.6	15.2	11.5	13.8	15.9	11.6	13.8	16.5	12.0	14.4	17.0	12.3	14.8	18.5		
KW		1.94	1.94	1.94	1.98	1.99	1.99	2.04	2.04	2.04	2.12	2.12	2.12	2.24	2.24	2.24		

DSH PERFORMANCE DATA

DSH036B			SCFM	800			1000			1200			1400			1600		
			EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F
Ambient Condenser Air Temperature	EDB	EWB																
	85°F	57°F	TC	28.7	29.6	30.5	30.9	32.2	33.6	33.0	34.8	36.6	34.6	36.6	38.5	35.6	37.5	39.5
			SC	27.6	29.0	30.5	30.3	31.9	33.6	33.0	34.8	36.6	34.6	36.6	38.5	35.6	37.5	39.5
			KW	2.06	2.09	2.11	2.12	2.12	2.13	2.14	2.15	2.16	2.16	2.16	2.17	2.18	2.19	2.20
		62°F	TC	31.9	32.3	32.8	34.1	34.8	35.4	36.3	37.2	38.1	37.6	38.5	39.5	38.4	39.4	40.3
			SC	19.9	22.0	24.1	21.9	24.5	27.0	23.9	26.9	30.0	25.2	28.7	32.1	26.2	29.8	33.3
			KW	2.15	2.16	2.17	2.18	2.19	2.19	2.21	2.21	2.22	2.22	2.23	2.24	2.24	2.25	2.26
		67°F	TC	35.0	35.0	35.0	37.3	37.3	37.3	39.6	39.6	39.6	40.5	40.5	40.5	41.2	41.2	41.2
			SC	16.7	19.6	22.6	18.3	22.1	25.9	20.0	24.6	29.1	21.3	26.6	31.9	22.6	28.0	33.4
			KW	2.23	2.23	2.23	2.25	2.25	2.25	2.28	2.28	2.28	2.29	2.29	2.29	2.32	2.32	2.32
	72°F	TC	37.7	37.7	37.7	39.6	39.6	39.6	41.6	41.6	41.6	43.7	43.7	43.7	43.7	43.7	43.7	
		SC	14.7	16.9	19.1	15.6	18.3	21.4	16.4	19.2	23.7	17.4	21.7	26.0	17.9	23.0	28.0	
		KW	2.21	2.21	2.21	2.31	2.31	2.31	2.40	2.40	2.40	2.41	2.41	2.41	2.43	2.43	2.43	
	95°F	57°F	TC	28.7	29.8	30.9	30.9	32.4	33.9	33.2	35.1	37.0	35.0	36.5	38.0	36.2	37.9	39.5
			SC	27.5	29.2	30.9	30.4	32.2	33.9	33.2	35.1	37.0	35.0	36.5	38.0	36.2	37.9	39.5
			KW	2.38	2.38	2.38	2.39	2.40	2.40	2.41	2.41	2.41	2.42	2.42	2.42	2.44	2.46	2.47
		62°F	TC	31.9	32.5	33.0	33.9	34.6	35.4	35.9	36.8	37.8	37.1	37.8	38.6	38.3	39.1	40.0
			SC	20.0	22.1	24.3	23.4	25.4	27.5	26.8	28.8	30.7	27.9	29.9	31.9	29.2	31.2	33.2
			KW	2.42	2.42	2.42	2.43	2.43	2.43	2.44	2.44	2.44	2.45	2.46	2.46	2.48	2.49	2.49
		67°F	TC	35.1	35.1	35.1	36.8	36.8	36.8	38.5	38.5	38.5	39.2	39.2	39.2	40.4	40.4	40.4
			SC	16.9	19.7	22.6	21.3	23.9	26.4	25.7	28.0	30.3	26.4	29.1	31.8	27.9	30.5	33.1
			KW	2.46	2.46	2.46	2.46	2.46	2.46	2.47	2.47	2.47	2.49	2.49	2.49	2.51	2.51	2.51
	72°F	TC	38.2	38.2	38.2	38.9	38.9	38.9	39.5	39.5	39.5	40.7	40.7	40.7	41.4	41.4	41.4	
		SC	14.5	17.0	19.4	19.2	21.2	23.5	23.4	25.3	27.5	24.6	26.7	28.9	25.4	27.9	30.4	
		KW	2.44	2.44	2.44	2.49	2.49	2.49	2.53	2.53	2.53	2.55	2.55	2.55	2.56	2.56	2.56	
	105°F	57°F	TC	28.6	29.9	31.2	31.0	32.7	34.3	33.4	35.4	37.4	35.4	36.4	37.4	36.8	38.2	39.6
			SC	27.5	29.3	31.2	30.5	32.4	34.3	33.4	35.4	37.4	35.4	36.4	37.4	36.8	38.2	39.6
			KW	2.63	2.65	2.66	2.66	2.67	2.67	2.67	2.67	2.68	2.67	2.68	2.68	2.69	2.69	2.69
		62°F	TC	31.9	32.6	33.2	33.7	34.5	35.3	35.4	36.4	37.4	36.6	37.1	37.6	38.2	38.9	39.6
			SC	20.1	22.2	24.4	24.9	26.4	27.9	29.8	30.6	31.4	30.6	31.1	31.6	32.1	32.6	33.1
			KW	2.66	2.66	2.67	2.67	2.67	2.67	2.67	2.68	2.68	2.68	2.69	2.69	2.70	2.72	2.74
		67°F	TC	35.3	35.3	35.3	36.3	36.3	36.3	37.4	37.4	37.4	37.8	37.8	37.8	39.6	39.6	39.6
			SC	17.1	19.8	22.6	24.2	25.6	27.0	31.4	31.4	31.4	31.5	31.6	31.7	33.3	33.1	32.8
			KW	2.66	2.66	2.66	2.67	2.67	2.67	2.68	2.68	2.68	2.69	2.69	2.69	2.71	2.71	2.71
	72°F	TC	38.7	38.7	38.7	38.1	38.1	38.1	37.4	37.4	37.4	37.8	37.8	37.8	39.1	39.1	39.1	
		SC	14.3	17.0	19.7	22.9	24.2	25.6	31.4	31.4	31.4	31.7	31.7	31.7	32.8	32.8	32.8	
		KW	2.67	2.67	2.67	2.66	2.66	2.66	2.67	2.67	2.67	2.69	2.69	2.69	2.71	2.71	2.71	
	115°F	57°F	TC	28.5	30.0	31.5	31.1	32.9	34.6	33.6	35.7	37.8	35.8	36.3	36.9	37.4	38.5	39.7
			SC	27.4	29.5	31.5	30.5	32.6	34.6	33.6	35.7	37.8	35.8	36.3	36.9	37.4	38.5	39.7
			KW	2.88	2.88	2.89	2.89	2.89	2.90	2.90	2.91	2.91	2.91	2.92	2.92	2.95	2.95	2.98
		62°F	TC	32.0	32.7	33.5	33.5	34.4	35.3	35.0	36.0	37.1	36.1	36.4	36.7	38.1	38.7	39.2
			SC	20.2	22.4	24.5	26.4	27.4	28.3	29.4	30.3	31.1	30.3	30.5	30.8	32.0	32.4	32.9
			KW	2.89	2.89	2.90	2.90	2.90	2.90	2.91	2.91	2.92	2.92	2.93	2.93	2.96	2.96	2.99
		67°F	TC	35.5	35.5	35.5	35.9	35.9	35.9	36.3	36.3	36.3	36.4	36.4	36.4	38.8	38.8	38.8
			SC	17.3	19.9	22.6	27.2	27.4	27.6	30.5	30.5	30.5	30.3	30.4	30.6	32.6	32.4	32.5
			KW	2.90	2.90	2.91	2.91	2.92	2.92	2.92	2.93	2.93	2.94	2.94	2.94	2.97	2.98	3.00
	72°F	TC	39.2	39.2	39.2	37.3	37.3	37.3	35.3	35.3	35.3	34.8	34.8	34.8	36.8	36.8	36.8	
SC		14.1	17.1	20.1	26.5	27.2	27.7	29.6	29.6	29.6	29.3	29.3	29.3	30.9	30.9	30.9		
KW		2.91	2.91	2.92	2.92	2.93	2.93	2.94	2.94	2.94	2.95	2.95	2.96	2.98	2.99	3.02		

DSH048B			SCFM	1200			1400			1600			1800			2000		
			EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F
Ambient Condenser Air Temperature	EDB	EWB																
	85°F	57°F	TC	43.7	45.4	47.2	44.6	46.8	48.9	45.1	47.4	49.8	48.9	51.2	53.5	50.5	53.0	55.5
			SC	41.6	44.4	47.2	44.0	46.4	48.9	45.1	47.4	49.8	48.9	51.2	53.5	50.5	53.0	55.5
			kW	2.99	3.00	3.01	3.00	3.01	3.02	3.00	3.01	3.03	3.03	3.04	3.05	3.04	3.05	3.07
		62°F	TC	47.9	48.8	49.7	49.3	50.3	51.4	49.9	51.1	52.2	53.4	54.5	55.7	54.8	56.0	57.3
			SC	35.6	39.8	44.0	37.4	41.8	46.1	38.3	42.7	47.1	41.8	47.1	52.4	43.4	49.2	55.0
			kW	3.03	3.03	3.04	3.04	3.04	3.05	3.04	3.05	3.06	3.07	3.08	3.08	3.09	3.10	3.10
		67°F	TC	52.3	52.3	52.3	54.0	54.0	54.0	54.8	54.8	54.8	57.9	57.9	57.9	59.2	59.2	59.2
			SC	29.6	35.1	40.6	30.8	37.0	43.1	31.4	37.9	44.4	34.6	42.8	51.0	36.1	45.2	54.3
			kW	3.06	3.06	3.06	3.08	3.08	3.08	3.09	3.09	3.09	3.12	3.12	3.12	3.14	3.14	3.14
	72°F	TC	56.1	56.1	56.1	57.9	57.9	57.9	58.7	58.7	58.7	60.3	60.3	60.3	62.6	62.6	62.6	
		SC	27.0	30.9	34.4	28.4	32.2	36.0	29.1	32.8	36.7	30.3	34.6	41.7	32.2	36.7	44.0	
		kW	3.08	3.08	3.08	3.10	3.10	3.10	3.11	3.11	3.11	3.11	3.11	3.11	3.17	3.17	3.17	
	95°F	57°F	TC	42.0	43.8	45.6	43.1	45.2	47.2	43.6	45.8	48.0	47.2	49.5	51.8	48.9	51.3	53.6
			SC	40.8	43.2	45.6	42.7	44.9	47.2	43.6	45.8	48.0	47.2	49.5	51.8	48.9	51.3	53.6
			kW	3.40	3.40	3.41	3.40	3.42	3.43	3.41	3.42	3.44	3.44	3.46	3.47	3.46	3.48	3.49
		62°F	TC	46.2	47.1	48.0	47.5	48.5	49.5	48.1	49.2	50.3	51.7	52.8	54.0	53.1	54.3	55.4
			SC	34.8	38.8	42.7	36.7	40.7	44.8	37.6	41.7	45.8	40.5	45.8	51.0	42.4	47.9	53.4
			kW	3.44	3.44	3.45	3.45	3.46	3.47	3.46	3.47	3.48	3.50	3.51	3.52	3.52	3.53	3.54
		67°F	TC	50.4	50.4	50.4	51.8	51.8	51.8	52.5	52.5	52.5	56.1	56.1	56.1	57.3	57.3	57.3
			SC	28.8	34.3	39.8	30.6	36.4	42.3	31.5	37.5	43.5	33.8	42.0	50.1	35.9	44.5	53.2
			kW	3.48	3.48	3.48	3.50	3.50	3.50	3.51	3.51	3.51	3.56	3.56	3.56	3.58	3.58	3.58
	72°F	TC	54.2	54.2	54.2	55.5	55.5	55.5	56.1	56.1	56.1	58.7	58.7	58.7	61.3	61.3	61.3	
		SC	25.8	30.2	33.5	26.8	31.1	35.1	27.3	31.6	35.9	28.7	34.0	40.8	30.7	35.8	43.3	
		kW	3.51	3.51	3.51	3.53	3.53	3.53	3.54	3.54	3.54	3.57	3.57	3.57	3.62	3.62	3.62	
	105°F	57°F	TC	40.4	42.2	43.9	41.6	43.5	45.5	42.1	44.2	46.3	45.6	47.9	50.1	47.2	49.5	51.8
			SC	39.9	41.9	43.9	41.4	43.4	45.5	42.1	44.2	46.3	45.6	47.9	50.1	47.2	49.5	51.8
			kW	3.80	3.81	3.82	3.81	3.83	3.84	3.81	3.83	3.85	3.86	3.88	3.89	3.88	3.90	3.91
		62°F	TC	44.5	45.4	46.2	45.6	46.6	47.6	46.2	47.3	48.3	50.0	51.1	52.3	51.3	52.5	53.6
			SC	34.0	37.7	41.5	35.1	39.7	43.5	36.0	40.7	44.5	39.3	44.5	49.7	41.4	46.7	51.9
			kW	3.85	3.86	3.86	3.87	3.88	3.88	3.88	3.89	3.89	3.93	3.94	3.95	3.95	3.96	3.97
		67°F	TC	48.5	48.5	48.5	49.7	49.7	49.7	50.3	50.3	50.3	54.4	54.4	54.4	55.4	55.4	55.4
			SC	28.0	33.5	39.0	30.4	35.9	41.4	31.5	37.1	42.6	34.5	41.0	49.2	35.6	43.8	52.0
			kW	3.91	3.91	3.91	3.93	3.93	3.93	3.94	3.94	3.94	4.00	4.00	4.00	4.02	4.02	4.02
	72°F	TC	52.4	52.4	52.4	53.1	53.1	53.1	53.5	53.5	53.5	57.0	57.0	57.0	60.1	60.1	60.1	
		SC	25.2	28.9	32.7	25.8	30.0	34.2	26.2	30.6	35.0	28.1	33.4	40.0	29.9	35.5	42.6	
		kW	3.94	3.94	3.94	3.96	3.96	3.96	3.97	3.97	3.97	4.03	4.03	4.03	4.08	4.08	4.08	
	115°F	57°F	TC	38.8	40.5	42.3	40.0	41.9	43.8	40.6	42.6	44.5	43.9	46.2	48.4	45.5	47.7	49.9
			SC	39.1	40.7	42.3	40.1	42.0	43.8	40.6	42.6	44.5	43.9	46.2	48.4	45.5	47.7	49.9
			kW	4.21	4.22	4.23	4.22	4.23	4.25	4.22	4.24	4.26	4.27	4.29	4.32	4.30	4.32	4.34
		62°F	TC	42.7	43.6	44.5	43.8	44.8	45.7	44.4	45.3	46.3	48.3	49.4	50.6	49.6	50.7	51.8
			SC	33.2	36.7	40.2	35.2	38.7	42.2	36.1	39.6	43.1	39.4	43.2	48.4	40.6	45.4	50.3
			kW	4.27	4.27	4.28	4.29	4.29	4.30	4.29	4.30	4.31	4.36	4.37	4.38	4.38	4.39	4.40
		67°F	TC	46.7	46.7	46.7	47.6	47.6	47.6	48.1	48.1	48.1	52.7	52.7	52.7	53.6	53.6	53.6
			SC	27.2	32.7	38.1	30.1	35.3	40.5	30.7	36.3	41.7	34.0	40.5	48.2	35.3	43.0	50.7
			kW	4.33	4.33	4.33	4.35	4.35	4.35	4.36	4.36	4.36	4.44	4.44	4.44	4.46	4.46	4.46
	72°F	TC	50.5	50.5	50.5	50.7	50.7	50.7	50.8	50.8	50.8	55.4	55.4	55.4	58.8	58.8	58.8	
SC		23.6	27.7	31.8	24.6	29.0	33.4	25.0	29.6	34.2	27.6	32.8	39.1	30.1	35.3	41.9		
kW		4.37	4.37	4.37	4.39	4.39	4.39	4.40	4.40	4.40	4.49	4.49	4.49	4.53	4.53	4.53		

DSH PERFORMANCE DATA

DSH060B			SCFM	1600			1800			2000			2200			2400				
			EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F		
Ambient Condenser Air Temperature	EDB	EWB																		
	85°F	57°F	TC	51.5	53.9	56.2	53.0	55.8	58.6	54.5	57.7	60.9	56.5	59.6	62.6	58.2	61.0	63.8		
			SC	49.8	53.0	56.2	52.2	55.4	58.6	54.5	57.7	60.9	56.5	59.6	62.6	58.2	61.0	63.8		
			kW	3.35	3.38	3.41	3.37	3.41	3.45	3.39	3.44	3.48	3.42	3.46	3.51	3.44	3.48	3.52		
		62°F	TC	56.7	57.9	59.1	58.1	59.5	60.9	59.5	61.1	62.7	61.3	62.8	64.4	62.5	63.9	65.3		
			SC	43.3	48.4	53.5	45.2	50.7	56.3	47.1	53.1	59.1	48.9	55.1	61.5	50.4	56.9	63.5		
			kW	3.42	3.44	3.45	3.45	3.46	3.48	3.47	3.49	3.51	3.49	3.51	3.53	3.51	3.53	3.55		
		67°F	TC	61.9	61.9	61.9	63.2	63.2	63.2	64.6	64.6	64.6	66.1	66.1	66.1	66.8	66.8	66.8		
			SC	35.8	42.8	49.7	37.2	45.1	52.9	38.7	47.4	56.2	40.0	49.6	59.2	41.6	51.8	62.1		
			kW	3.50	3.50	3.50	3.52	3.52	3.52	3.54	3.54	3.54	3.56	3.56	3.56	3.57	3.57	3.57		
	72°F	TC	66.5	66.5	66.5	67.9	67.9	67.9	69.2	69.2	69.2	70.6	70.6	70.6	72.1	72.1	72.1			
		SC	30.8	37.4	41.8	32.2	38.7	44.3	33.1	39.9	46.8	33.8	41.0	48.5	34.6	42.2	50.5			
		kW	3.56	3.56	3.56	3.58	3.58	3.58	3.60	3.60	3.60	3.62	3.62	3.62	3.65	3.65	3.65			
	95°F	57°F	TC	49.9	52.3	54.7	51.5	54.2	56.9	53.0	56.0	59.1	54.6	57.5	60.4	56.3	59.0	61.7		
			SC	49.0	51.9	54.7	51.0	53.9	56.9	53.0	56.0	59.1	54.6	57.5	60.4	56.3	59.0	61.7		
			kW	3.82	3.86	3.89	3.84	3.88	3.92	3.87	3.91	3.96	3.89	3.93	3.97	3.92	3.95	3.99		
		62°F	TC	54.9	56.1	57.3	56.3	57.7	59.0	57.7	59.2	60.7	59.4	60.8	62.2	60.7	62.1	63.4		
			SC	42.3	47.3	52.2	44.1	49.5	54.9	45.9	51.8	57.7	47.5	53.6	59.8	49.0	55.5	61.9		
			kW	3.90	3.92	3.93	3.92	3.94	3.96	3.94	3.97	3.99	3.97	3.99	4.01	3.99	4.01	4.03		
		67°F	TC	59.9	59.9	59.9	61.1	61.1	61.1	62.4	62.4	62.4	64.1	64.1	64.1	65.2	65.2	65.2		
			SC	34.8	41.8	48.8	36.3	44.1	52.0	37.8	46.5	55.2	39.2	48.7	58.1	40.8	50.9	61.0		
			kW	3.97	3.97	3.97	4.00	4.00	4.00	4.02	4.02	4.02	4.05	4.05	4.05	4.07	4.07	4.07		
	72°F	TC	64.0	64.0	64.0	65.2	68.3	65.1	66.4	72.5	66.2	67.7	67.7	67.7	69.9	69.9	69.9			
		SC	30.6	34.8	40.8	31.6	37.5	43.1	32.3	40.3	45.4	33.1	39.8	47.4	34.7	41.7	49.5			
		kW	4.03	4.03	4.03	4.06	4.07	4.07	4.09	4.10	4.10	4.12	4.12	4.14	4.15	4.15	4.15			
	105°F	57°F	TC	48.4	50.8	53.1	49.9	52.6	55.2	51.5	54.4	57.3	52.8	55.4	58.1	54.4	57.1	59.7		
			SC	48.2	50.7	53.1	49.8	52.5	55.2	51.5	54.4	57.3	52.8	55.4	58.1	54.4	57.1	59.7		
			kW	4.30	4.33	4.36	4.32	4.36	4.40	4.34	4.39	4.44	4.36	4.40	4.44	4.39	4.43	4.47		
		62°F	TC	53.1	54.3	55.5	54.5	55.8	57.1	55.8	57.3	58.8	57.4	58.8	60.1	59.0	60.3	61.6		
			SC	41.4	46.2	50.9	43.1	48.3	53.6	44.7	50.5	56.3	46.1	52.1	58.1	47.7	54.0	60.4		
			kW	4.37	4.39	4.41	4.40	4.42	4.44	4.42	4.44	4.47	4.45	4.47	4.49	4.48	4.50	4.51		
		67°F	TC	57.9	57.9	57.9	59.0	59.0	59.0	60.2	60.2	60.2	62.1	62.1	62.1	63.5	63.5	63.5		
			SC	33.7	40.8	47.8	35.4	43.2	51.0	37.0	45.6	54.2	38.5	47.7	57.0	40.0	50.0	59.9		
			kW	4.45	4.45	4.45	4.48	4.48	4.48	4.50	4.50	4.50	4.54	4.54	4.54	4.56	4.56	4.56		
	72°F	TC	61.5	61.5	61.5	62.6	68.7	62.4	63.6	75.8	63.3	64.7	64.7	64.7	67.7	67.7	67.7			
		SC	29.4	35.3	39.9	30.2	36.4	42.0	30.9	37.5	44.1	32.2	39.3	46.4	33.8	41.4	49.0			
		kW	4.51	4.51	4.51	4.53	4.54	4.54	4.56	4.56	4.56	4.58	4.58	4.58	4.65	4.65	4.65			
	115°F	57°F	TC	46.8	49.2	51.5	48.4	51.0	53.5	50.0	52.8	55.5	50.9	53.4	55.8	52.6	55.1	57.7		
			SC	47.4	49.5	51.5	48.7	51.1	53.5	50.0	52.8	55.5	50.9	53.4	55.8	52.6	55.1	57.7		
			kW	4.77	4.80	4.84	4.79	4.83	4.86	4.81	4.86	4.87	4.83	4.87	4.90	4.87	4.90	4.94		
		62°F	TC	51.4	52.6	53.7	52.7	54.0	55.2	54.0	55.4	56.8	55.5	56.7	57.9	57.3	58.5	59.8		
			SC	40.5	45.1	49.7	42.0	47.1	52.3	43.5	49.2	54.8	44.9	50.6	56.4	46.4	52.6	58.8		
			kW	4.85	4.87	4.89	4.87	4.89	4.92	4.90	4.92	4.95	4.93	4.95	4.97	4.96	4.98	5.00		
		67°F	TC	55.9	55.9	55.9	56.9	56.9	56.9	58.0	58.0	58.0	60.1	60.1	60.1	61.9	61.9	61.9		
			SC	32.7	39.8	46.9	34.4	42.2	50.0	36.2	44.7	53.1	37.7	46.8	55.9	39.2	49.0	58.9		
			kW	4.93	4.93	4.93	4.96	4.96	4.96	4.98	4.98	4.98	5.03	5.03	5.03	5.06	5.06	5.06		
	72°F	TC	59.0	59.0	59.0	59.7	59.7	59.7	60.7	60.7	60.7	61.8	61.8	61.8	65.5	65.5	65.5			
SC		28.9	34.2	38.9	29.7	35.2	40.8	30.6	36.2	42.7	31.3	38.7	45.3	33.4	41.2	47.3				
kW		4.98	4.98	4.98	5.01	5.01	5.01	5.04	5.04	5.04	5.06	5.06	5.06	5.14	5.14	5.14				

DSH096B			SCFM	2400			2800			3200			3600			4000		
			EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F
Ambient Condenser Air Temperature	EDB	EWB																
			TC	79.7	84.0	88.4	83.6	88.2	92.9	86.8	91.9	96.9	89.8	95.0	100.1	92.1	97.8	103.4
	57°F	SC	78.9	83.7	88.4	83.6	88.2	92.9	86.8	91.9	96.9	89.8	95.0	100.1	92.1	97.8	103.4	
		KW	5.13	5.16	5.18	5.16	5.18	5.21	5.18	5.21	5.24	5.20	5.24	5.27	5.22	5.25	5.29	
		TC	87.0	89.2	91.4	90.3	92.6	95.0	92.9	95.4	97.9	95.3	97.9	100.5	97.2	100.0	102.8	
	62°F	SC	64.1	72.2	80.4	67.9	76.9	85.8	71.1	80.8	90.5	74.0	84.6	95.3	76.4	87.8	99.3	
		KW	5.18	5.20	5.21	5.21	5.22	5.23	5.23	5.24	5.25	5.24	5.26	5.28	5.26	5.27	5.29	
		TC	94.4	94.4	94.4	97.0	97.0	97.0	99.0	99.0	99.0	100.8	100.8	100.8	102.2	102.2	102.2	
	67°F	SC	52.0	63.7	75.3	55.1	68.5	82.0	58.3	72.9	87.5	61.3	77.6	93.8	63.8	81.3	98.7	
		KW	5.24	5.24	5.24	5.25	5.25	5.25	5.27	5.27	5.27	5.28	5.28	5.28	5.29	5.29	5.29	
		TC	102.7	102.7	102.7	105.4	105.4	105.4	107.8	107.8	107.8	109.6	109.6	109.6	110.2	110.2	110.2	
	72°F	SC	46.9	55.4	61.6	48.6	57.8	66.9	49.9	59.6	71.6	51.2	62.1	76.0	52.2	63.1	80.0	
		KW	5.29	5.29	5.29	5.31	5.31	5.31	5.32	5.32	5.32	5.34	5.34	5.34	5.35	5.35	5.35	
		TC	76.2	80.5	84.9	79.9	84.6	89.2	83.0	87.9	92.7	85.8	90.8	95.8	88.1	93.3	98.5	
	95°F	57°F	SC	75.8	80.4	84.9	79.9	84.6	89.2	83.0	87.9	92.7	85.8	90.8	95.8	88.1	93.3	98.5
			KW	5.87	5.89	5.91	5.89	5.91	5.94	5.91	5.94	5.97	5.94	5.97	6.00	5.96	5.99	6.02
			TC	83.0	85.2	87.4	86.1	88.4	90.8	88.5	90.9	93.4	90.7	93.2	95.7	93.0	95.6	98.2
		62°F	SC	61.7	69.6	77.5	65.2	74.1	82.9	68.3	77.9	87.6	71.0	81.3	91.6	73.5	84.2	94.9
			KW	5.92	5.93	5.94	5.94	5.95	5.97	5.96	5.97	5.99	5.98	5.99	6.01	5.99	6.01	6.02
			TC	89.9	89.9	89.9	92.3	92.3	92.3	94.0	94.0	94.0	95.7	95.7	95.7	97.9	97.9	97.9
		67°F	SC	50.1	61.6	73.1	53.3	66.5	79.6	56.4	71.0	85.6	59.3	75.0	90.6	61.9	78.2	94.6
			KW	5.98	5.98	5.98	5.99	5.99	5.99	6.01	6.01	6.01	6.02	6.02	6.02	6.03	6.03	6.03
			TC	97.8	97.8	97.8	100.1	100.1	100.1	102.4	102.4	102.4	103.5	103.5	103.5	104.7	104.7	104.7
		72°F	SC	44.0	52.7	60.0	44.2	55.3	65.1	44.5	57.1	69.7	44.6	59.3	73.9	43.7	60.9	78.2
			KW	6.02	6.02	6.02	6.05	6.05	6.05	6.06	6.06	6.06	6.07	6.07	6.07	6.09	6.09	6.09
			TC	72.7	77.0	81.3	76.3	80.9	85.4	79.2	83.9	88.6	81.7	86.6	91.5	84.0	88.8	93.7
	105°F	57°F	SC	72.7	77.0	81.3	76.3	80.9	85.4	79.2	83.9	88.6	81.7	86.6	91.5	84.0	88.8	93.7
			KW	6.60	6.62	6.64	6.62	6.65	6.67	6.65	6.68	6.71	6.68	6.70	6.73	6.69	6.72	6.75
			TC	79.0	81.2	83.3	82.0	84.3	86.5	84.1	86.4	88.8	86.1	88.6	91.0	88.8	91.3	93.7
		62°F	SC	59.2	67.0	74.7	62.6	71.2	79.9	65.4	75.1	84.7	68.1	78.0	87.9	70.5	80.5	90.5
			KW	6.66	6.67	6.68	6.67	6.69	6.70	6.69	6.71	6.72	6.71	6.73	6.74	6.73	6.74	6.76
			TC	85.3	85.3	85.3	87.7	87.7	87.7	89.0	89.0	89.0	90.5	90.5	90.5	93.7	93.7	93.7
		67°F	SC	48.2	59.5	70.8	51.5	64.4	77.3	54.4	69.1	83.8	57.3	72.4	87.4	59.9	75.2	90.5
			KW	6.72	6.72	6.72	6.73	6.73	6.73	6.74	6.74	6.74	6.75	6.75	6.75	6.77	6.77	6.77
			TC	92.8	92.8	92.8	94.9	94.9	94.9	97.0	97.0	97.0	97.3	97.3	97.3	99.1	99.1	99.1
		72°F	SC	40.4	49.4	58.4	41.5	52.9	63.2	42.6	55.0	67.7	42.9	56.5	71.8	43.9	59.5	76.4
			KW	6.75	6.75	6.75	6.78	6.78	6.78	6.79	6.79	6.79	6.81	6.81	6.81	6.82	6.82	6.82
			TC	69.3	73.7	77.8	72.7	77.2	81.7	75.4	79.9	84.4	77.7	82.4	87.1	79.9	84.4	88.8
	115°F	57°F	SC	69.6	73.7	77.8	72.7	77.2	81.7	75.4	79.9	84.4	77.7	82.4	87.1	79.9	84.4	88.8
			KW	7.33	7.35	7.38	7.35	7.38	7.41	7.38	7.41	7.44	7.41	7.44	7.46	7.43	7.45	7.48
			TC	75.0	77.1	79.3	77.8	80.1	82.3	79.7	81.9	84.7	81.5	83.9	87.2	84.7	86.9	89.1
		62°F	SC	56.8	64.3	71.9	59.9	68.4	76.9	62.6	72.2	81.8	65.2	74.7	84.2	67.6	76.8	86.1
			KW	7.39	7.41	7.42	7.41	7.42	7.44	7.42	7.44	7.46	7.45	7.46	7.47	7.46	7.48	7.49
			TC	80.7	80.7	80.7	83.0	83.0	83.0	84.0	84.0	84.9	85.4	85.4	87.2	89.4	89.4	89.4
		67°F	SC	46.4	57.5	68.6	49.6	62.3	74.9	52.4	67.2	82.0	55.3	69.7	84.2	58.0	72.2	86.3
			KW	7.46	7.46	7.46	7.46	7.46	7.46	7.47	7.47	7.47	7.48	7.48	7.48	7.50	7.50	7.50
			TC	87.9	87.9	87.9	89.7	89.7	89.7	91.6	91.6	91.6	91.2	91.2	91.2	93.5	93.5	93.5
		72°F	SC	35.3	46.0	56.7	39.7	50.5	61.4	40.2	53.0	65.8	37.6	53.7	69.7	41.6	58.1	74.5
KW			7.49	7.49	7.49	7.51	7.51	7.51	7.53	7.53	7.53	7.55	7.55	7.55	7.56	7.56	7.56	
TC																		

DSH FAN PERFORMANCE DATA

EVAPORATOR FAN PERFORMANCE

MODEL #	SUPPLY CFM	AVAILABLE EXTERNAL STATIC PRESSURE - Inches W.C. ¹																			
		0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH024B	600	187	0.01	399	0.05	544	0.08	650	0.10	757	0.17	843	0.24	-	-	-	-	-	-	-	-
	700	219	0.03	413	0.06	553	0.10	662	0.13	768	0.20	852	0.27	-	-	-	-	-	-	-	-
	800	250	0.04	428	0.08	565	0.12	675	0.16	777	0.23	859	0.30	-	-	-	-	-	-	-	-
	900	280	0.05	444	0.09	571	0.14	682	0.19	785	0.26	865	0.34	-	-	-	-	-	-	-	-
	1000	312	0.06	463	0.11	585	0.16	688	0.22	790	0.29	870	0.37	-	-	-	-	-	-	-	-
DSH036B	800	290	0.04	455	0.08	575	0.11	700	0.19	810	0.25	886	0.33	960	0.38	-	-	-	-	-	-
	1000	362	0.08	502	0.13	617	0.19	726	0.24	820	0.31	900	0.39	980	0.47	-	-	-	-	-	-
	1200	434	0.13	555	0.19	659	0.26	751	0.33	835	0.39	917	0.47	992	0.56	-	-	-	-	-	-
	1400	507	0.21	613	0.28	707	0.35	792	0.43	870	0.51	943	0.59	1021	0.69	-	-	-	-	-	-
	1600	572	0.25	673	0.39	759	0.48	837	0.56	911	0.65	979	0.74	-	-	-	-	-	-	-	-
DSH048B	1200	376	0.10	507	0.16	617	0.23	714	0.30	800	0.36	883	0.44	967	0.53	1035	0.63	-	-	-	-
	1400	439	0.16	554	0.24	654	0.31	744	0.39	826	0.46	902	0.55	984	0.61	1050	0.69	-	-	-	-
	1600	502	0.25	604	0.33	696	0.41	779	0.50	856	0.59	928	0.68	996	0.76	1060	0.85	-	-	-	-
	1800	565	0.35	657	0.45	741	0.54	819	0.63	891	0.73	960	0.82	1024	0.93	-	-	-	-	-	-
	2000	628	0.49	711	0.59	789	0.69	861	0.79	930	0.90	994	1.00	-	-	-	-	-	-	-	-
DSH060B	1600	502	0.25	604	0.33	696	0.41	779	0.50	856	0.59	928	0.68	996	0.76	1060	0.85	-	-	-	-
	1800	565	0.35	657	0.45	741	0.54	819	0.63	891	0.73	960	0.82	1024	0.93	1086	1.03	-	-	-	-
	2000	628	0.49	711	0.59	789	0.69	861	0.79	930	0.90	994	1.00	1056	1.10	1115	1.23	-	-	-	-
	2200	690	0.65	767	0.76	839	0.88	906	0.99	971	1.10	1032	1.21	1091	1.33	1147	1.45	-	-	-	-
	2400	753	0.84	824	0.96	891	1.09	954	1.21	1015	1.33	1073	1.45	-	-	-	-	-	-	-	-
DSH096B	2400	458	0.31	543	0.42	619	0.53	690	0.64	752	0.75	812	0.87	878	1.04	935	1.21	985	1.40	1038	1.51
	2800	503	0.44	580	0.57	650	0.69	715	0.83	776	0.97	831	1.11	885	1.27	942	1.45	998	1.65	1045	1.77
	3200	542	0.60	613	0.74	678	0.88	739	1.02	796	1.18	847	1.33	903	1.49	960	1.66	1017	1.83	1072	2.01
	3600	607	0.85	670	1.00	730	1.16	786	1.32	839	1.48	890	1.66	939	1.83	980	1.99	-	-	-	-
	4000	660	1.12	718	1.29	773	1.46	826	1.64	876	1.82	924	2.00	-	-	-	-	-	-	-	-

NOTE:

- Blower performance includes wet evaporator coil and 2" filters.
- At higher evaporator airflows and wet bulb conditions, condensate carry-over may occur. Decrease airflow downward as necessary.

Low Static Drive (Field-Supplied)
Standard Factory Drive
High-Static Drive

CONDENSER FAN PERFORMANCE

MODEL #	OUTDOOR CFM	EXTERNAL STATIC PRESSURE - INCHES W.C.													
		0.0		0.2		0.4		0.6		0.8		1.0		1.2	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH024B	1600	369	0.15	491	0.23	600	0.31	700	0.41	795	0.50	-	-	-	-
DSH036B	2100	485	0.35	579	0.44	668	0.54	752	0.68	831	0.75	-	-	-	-
DSH048B	2500	457	0.44	536	0.56	606	0.69	671	0.81	732	0.95	789	1.08	843	1.21
DSH060B	2900	523	0.67	595	0.81	658	0.96	717	1.10	773	1.25	826	1.40	876	1.50
DSH096B	6100	516	1.53	572	1.79	623	2.06	672	2.33	718	2.60	762	2.88	805	3.16

Standard Factory Drive
High-Static Drive

DSH ELECTRICAL DATA

ELECTRICAL DATA - STANDARD EVAPORATOR MOTOR

MODEL #	VOLTAGE	COMPRESSOR			EVAP FAN		COND FAN		MCA	MAX FUSE / CKT. BKR. AMP	
		QTY	RLA	LRA	HP	FLA	HP	FLA			
DSH024B1	208-230/1/60	1	@	12.8	58.3	0.50	4.8	0.50	4.8	25.60	35
DSH024B2	208-230/3/60	1	@	7.7	55.4	0.50	2.5	0.50	2.5	14.63	20
DSH036B1	208-230/1/60	1	@	16.7	79.0	0.75	6.0	0.75	6.0	32.88	45
DSH036B2	208-230/3/60	1	@	10.4	73.0	0.75	3.2	0.75	3.2	19.40	25
DSH036B4	460/3/60	1	@	5.8	38.0	0.75	1.5	0.75	1.5	10.25	15
DSH036B5	575/3/60	1	@	3.8	36.5	0.75	1.2	0.75	1.2	7.15	15
DSH048B1	208-230/1/60	1	@	21.8	107.0	0.75	6.0	1.50	9.0	42.25	60
DSH048B2	208-230/3/60	1	@	13.1	83.1	0.75	3.2	1.50	4.5	24.08	35
DSH048B4	460/3/60	1	@	6.1	41.0	0.75	1.5	1.50	2.2	11.33	15
DSH048B5	575/3/60	1	@	4.4	33.0	0.75	1.2	1.50	1.8	8.50	15
DSH060B2	208-230/3/60	1	@	16.0	110.0	1.00	3.1	1.50	4.5	27.60	40
DSH060B4	460/3/60	1	@	7.8	52.0	1.00	1.5	1.50	2.2	13.45	20
DSH060B5	575/3/60	1	@	5.7	38.9	1.00	1.2	1.50	1.8	10.13	15
DSH096B2	208-230/3/60	2	@	13.1	83.1	1.50	4.5	3.00	8.5	42.48	50
DSH096B4	460/3/60	2	@	6.1	41.0	1.50	2.2	3.00	4.2	20.13	25
DSH096B5	575/3/60	2	@	4.4	33.0	1.50	1.8	3.00	3.4	15.10	15

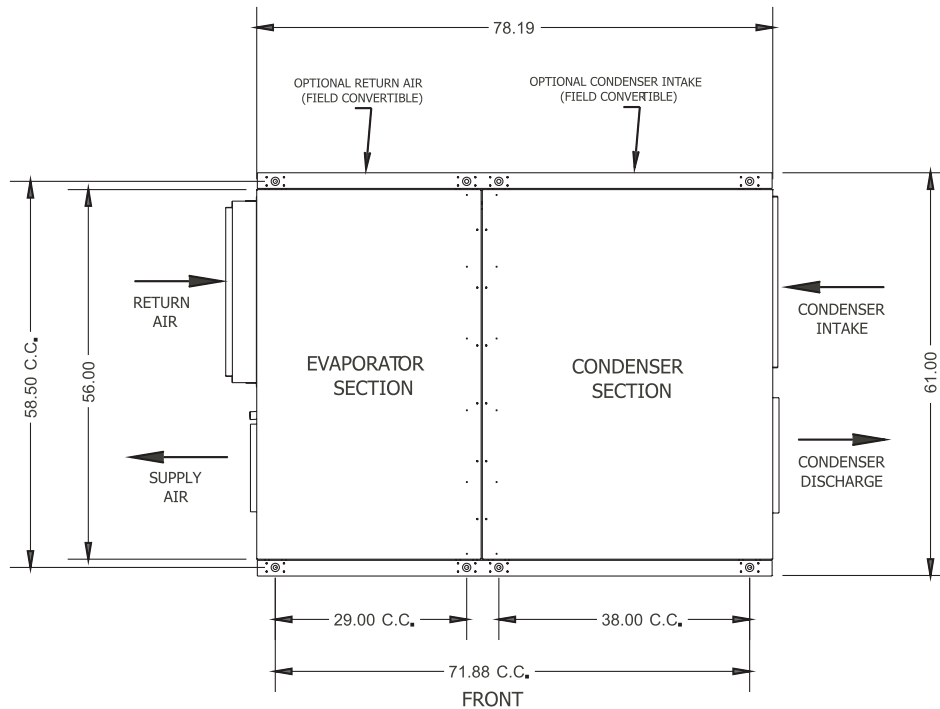
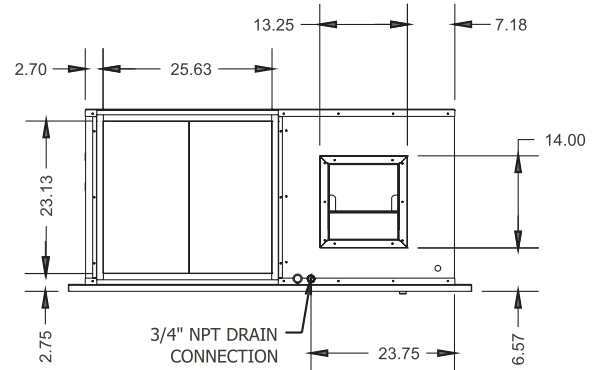
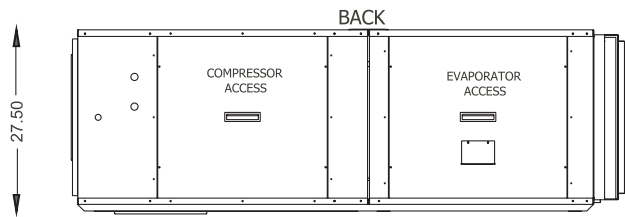
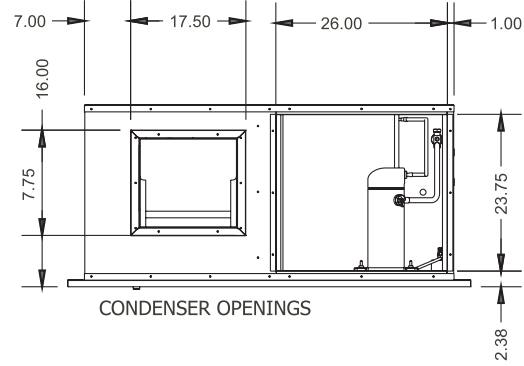
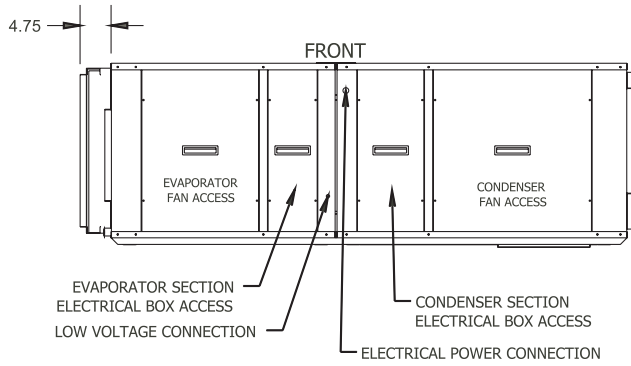
ELECTRICAL DATA - OVERSIZED EVAPORATOR MOTOR

MODEL #	VOLTAGE	COMPRESSOR			EVAP FAN		COND FAN		MCA	MAX FUSE / CKT. BKR. AMP	
		QTY	RLA	LRA	HP	FLA	HP	FLA			
DSH048B1	208-230/1/60	1	@	21.8	107.0	1.00	7.4	1.50	9.0	43.65	60
DSH048B2	208-230/3/60	1	@	13.1	83.1	1.00	3.1	1.50	4.5	23.98	35
DSH048B4	460/3/60	1	@	6.1	41.0	1.00	1.5	1.50	2.2	11.33	15
DSH048B5	575/3/60	1	@	4.4	33.0	1.00	1.2	1.50	1.8	8.50	15
DSH060B2	208-230/3/60	1	@	16.0	110.0	1.50	4.5	1.50	4.5	29.00	45
DSH060B4	460/3/60	1	@	7.8	52.0	1.50	2.2	1.50	2.2	14.15	20
DSH060B5	575/3/60	1	@	5.7	38.9	1.50	1.8	1.50	1.8	10.73	15
DSH096B2	208-230/3/60	2	@	13.1	83.1	2.00	5.8	3.00	8.5	43.78	50
DSH096B4	460/3/60	2	@	6.1	41.0	2.00	2.9	3.00	4.2	20.83	25
DSH096B5	575/3/60	2	@	4.4	33.0	2.00	2.3	3.00	3.4	15.60	20

DSH DIMENSIONAL DATA

DSH024B & DSH036B

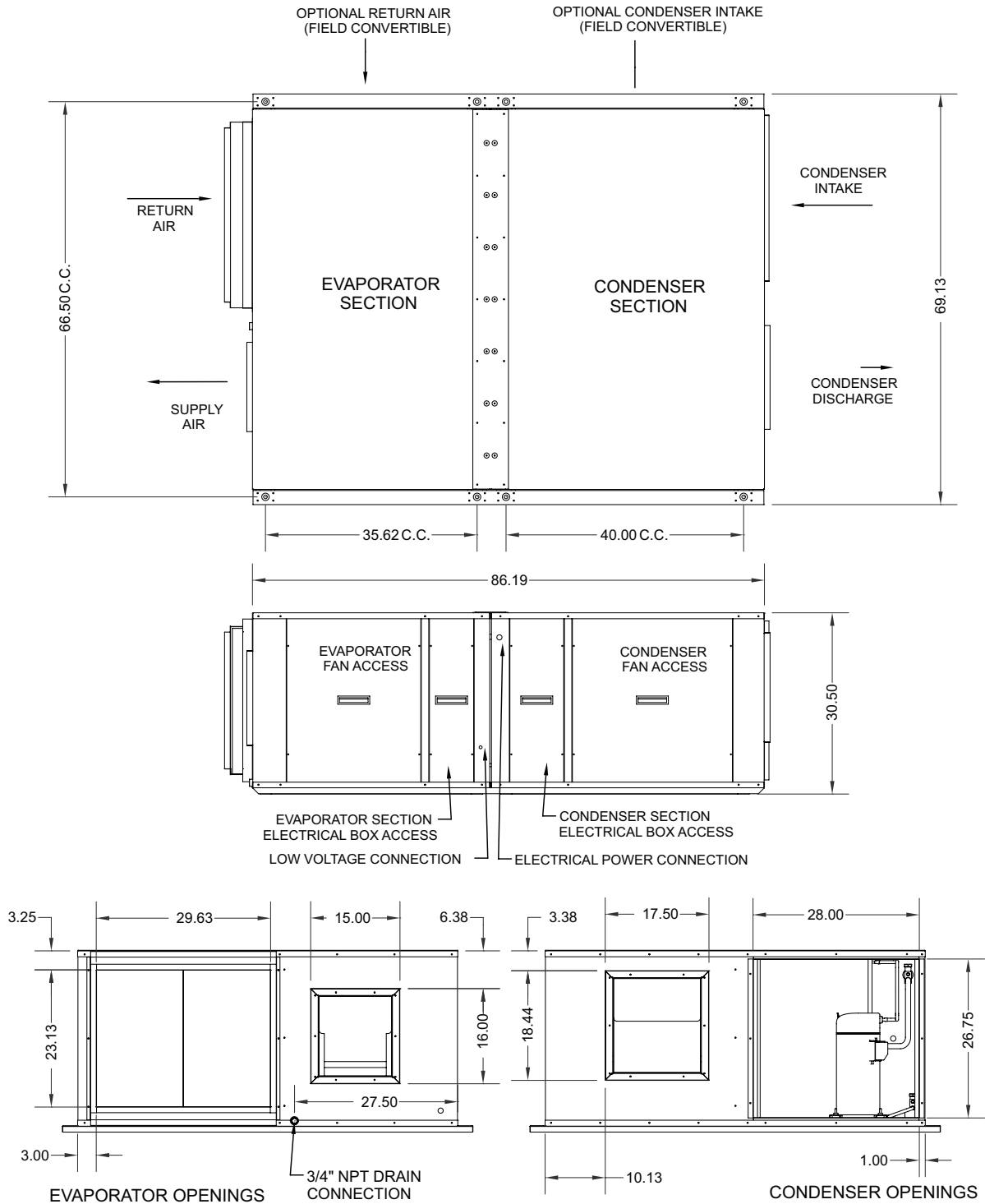
2-3 TON HORIZONTAL A/C UNIT
DIMENSIONAL DATA



Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

DSH048B & DSH060B

4-5 TON HORIZONTAL A/C UNIT DIMENSIONAL DATA

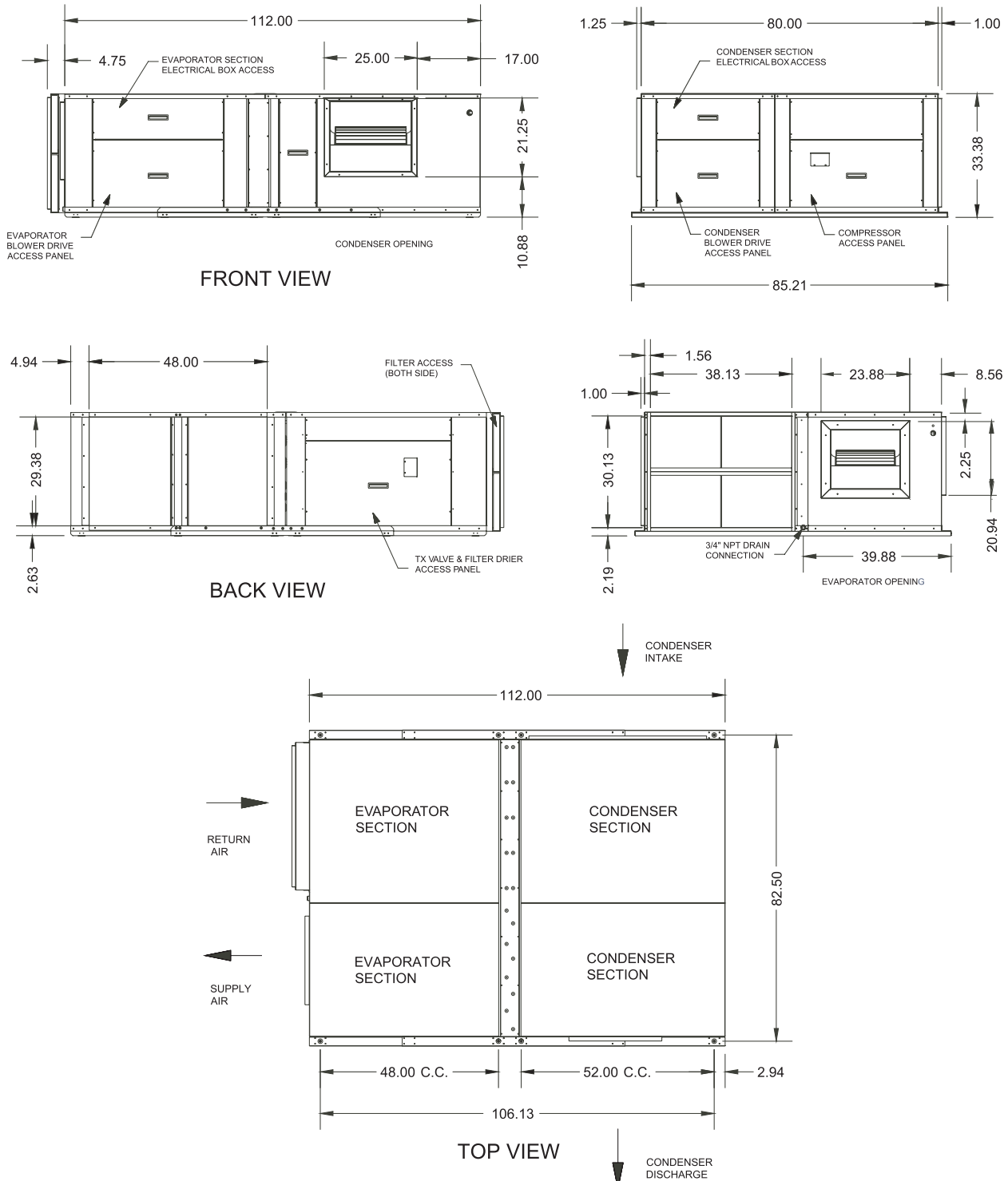


Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

DSH DIMENSIONAL DATA

DSH096B

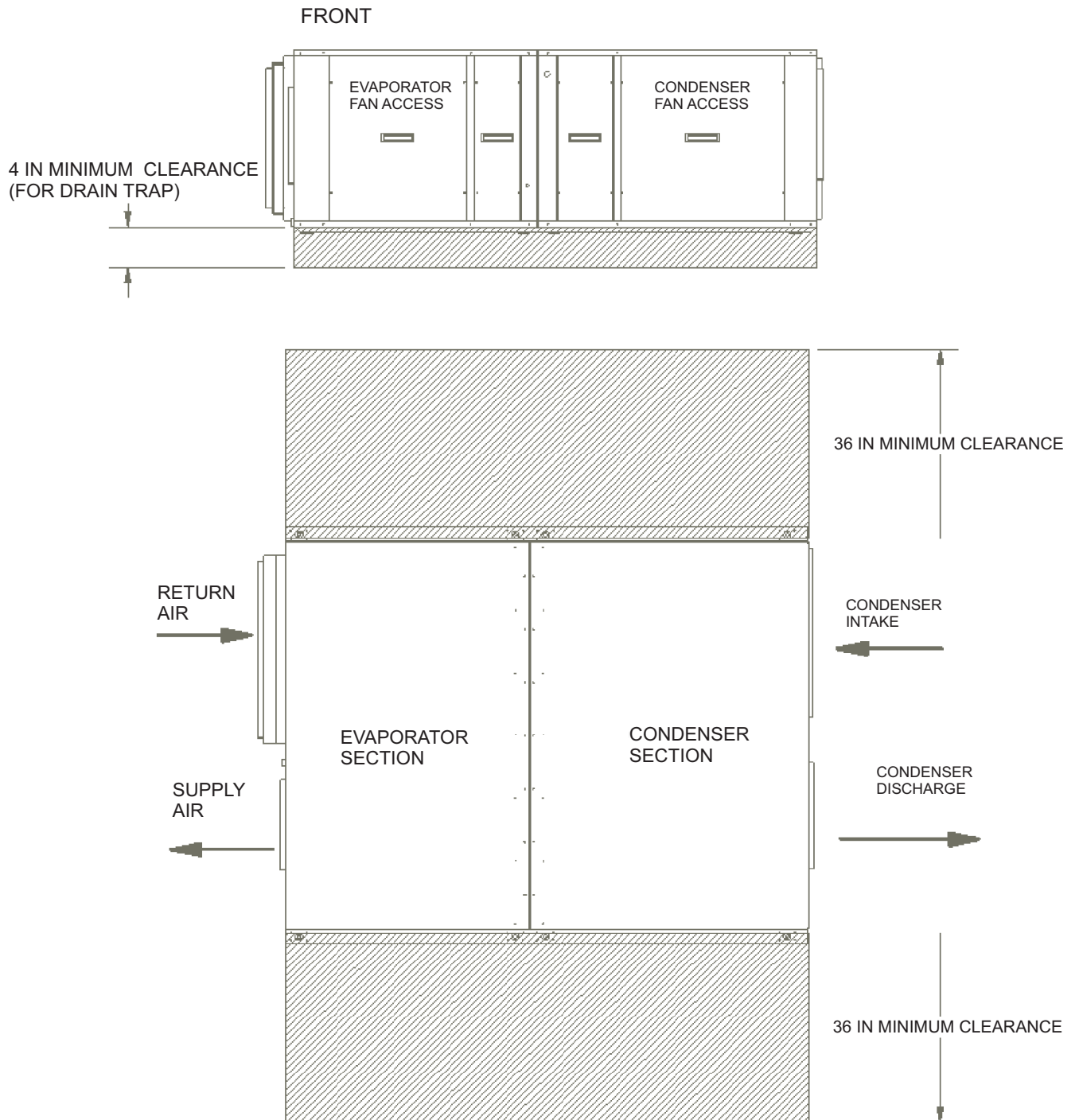
8 TON HORIZONTAL A/C UNIT DIMENSIONAL DATA



Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

TYPICAL SERVICE CLEARANCES

2-5 TON HORIZONTAL A/C UNIT SERVICE CLEARANCES

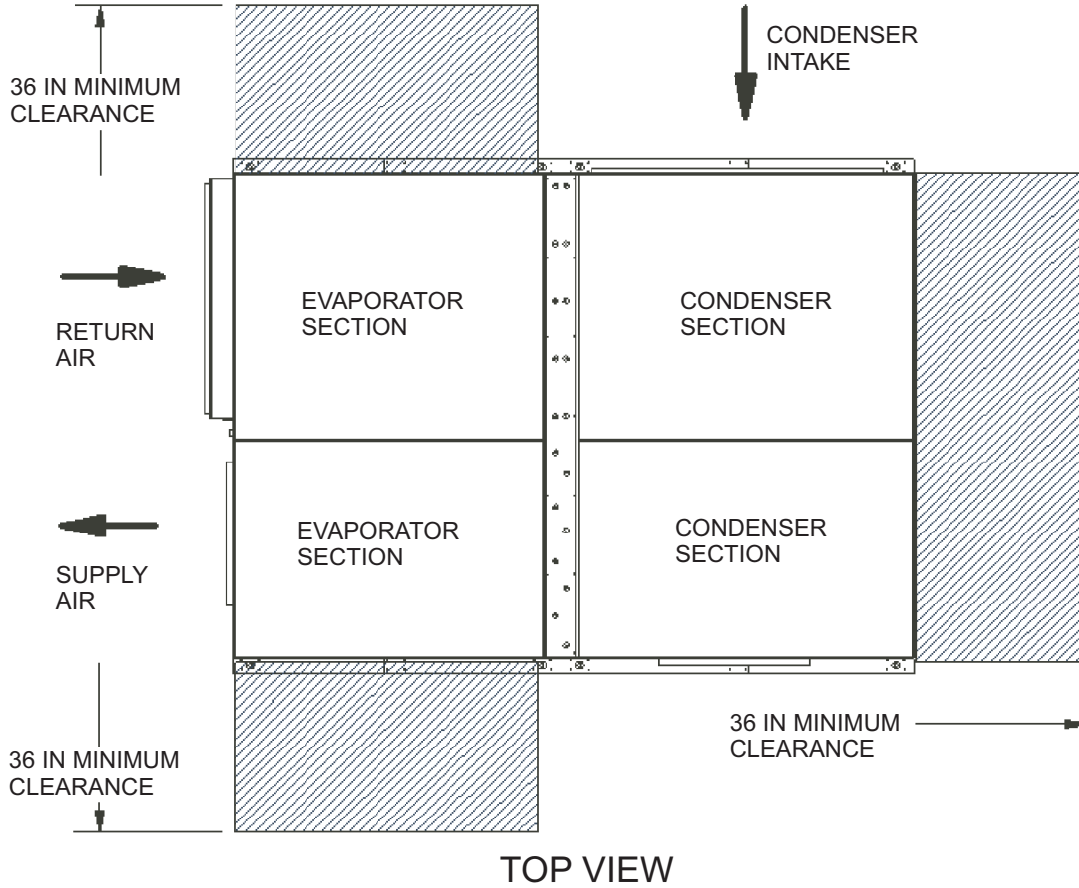
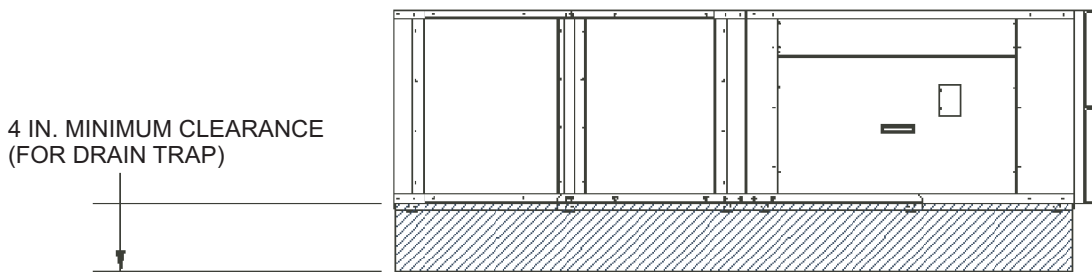


DSH DIMENSIONAL DATA

TYPICAL SERVICE CLEARANCES

8 TON HORIZONTAL A/C UNIT SERVICE CLEARANCES

BACK VIEW

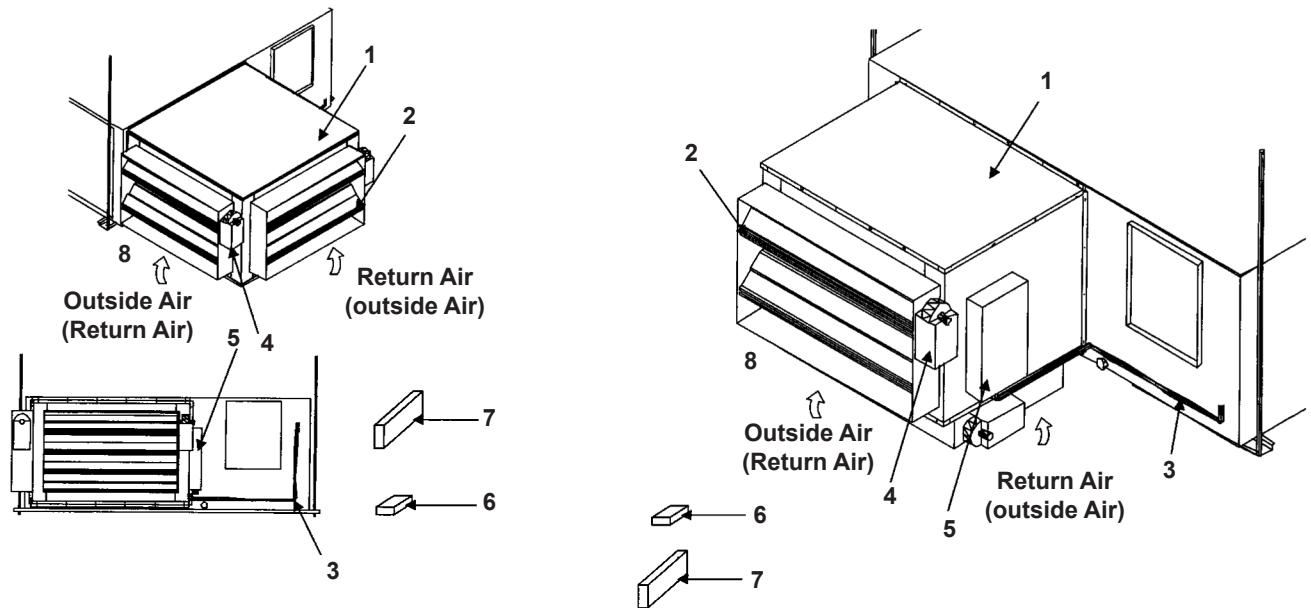


DSH AIRSIDE ECONOMIZER

Airside economizers are designed to meet current building and legislated codes for indoor ventilation. In addition to improving indoor air quality, economizers provide substantial energy savings by utilizing cool outside air instead of mechanical cooling whenever outside conditions permit.

The outlet or discharge of the airside economizer is fitted to the return air inlet of the packaged air conditioning unit. The two inlets to the economizer are fitted to the return air and outside air ductwork. Opposed blade dampers located in each inlet modulate the incoming air streams as they enter the mixing box. The outside air damper can be maintained at a predetermined position. In this way the buildings ventilation requirements can be met at all times.

HORIZONTAL DSH ECONOMIZER



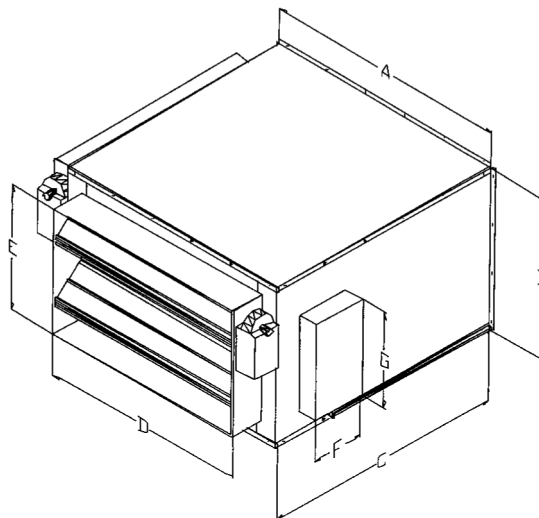
ALL ECONOMIZERS ARE SHIPPED COMPLETE WITH:

- 1- Heavy gauge galvanized cabinet, fully insulated.
- 2- Opposed blade, low leakage damper sections.
- 3- One step jack/plug wiring assembly.
- 4- SKYMARK M9200 series spring return damper actuators.
- 5- Honeywell W7215 logic module with protective cabinet.
- 6- Enthalpy sensor.
- 7- Discharge sensor.
- 8- Return air / outside configuration is field convertible

NOTE: Additional field support required.

DSH AIRSIDE ECONOMIZER

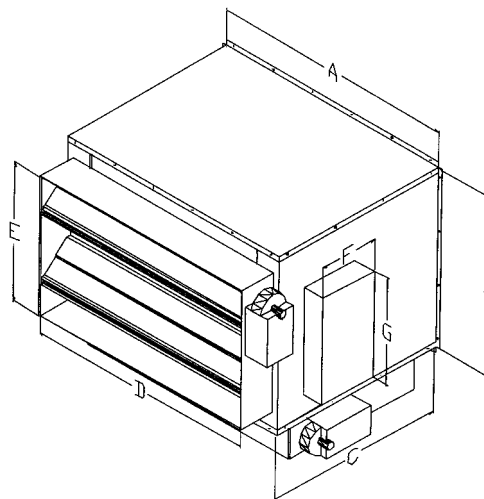
HORIZONTAL DSH ECONOMIZER STANDARD SIDE & FRONT DAMPER ARRANGEMENT



HORIZONTAL UNIT MODEL NUMBER	ECONOMIZER MODEL NUMBER	MIXING BOX DIM'N			DAMPER DIM'N	
		A	B	C	D	E
DSH024B/036B	HASE-036B-SF	26.06	23.32	23.44	17.00	14.00
DSH048B/060B	HASE-060B-SF	29.68	23.44	30.44	24.00	14.00
DSH096B	HASE-100B-SF	33.63	25.25	33.63	28.00	19.50

CONTROL MODULE	
F	G
8.00	15.00
8.00	15.00
8.00	15.00

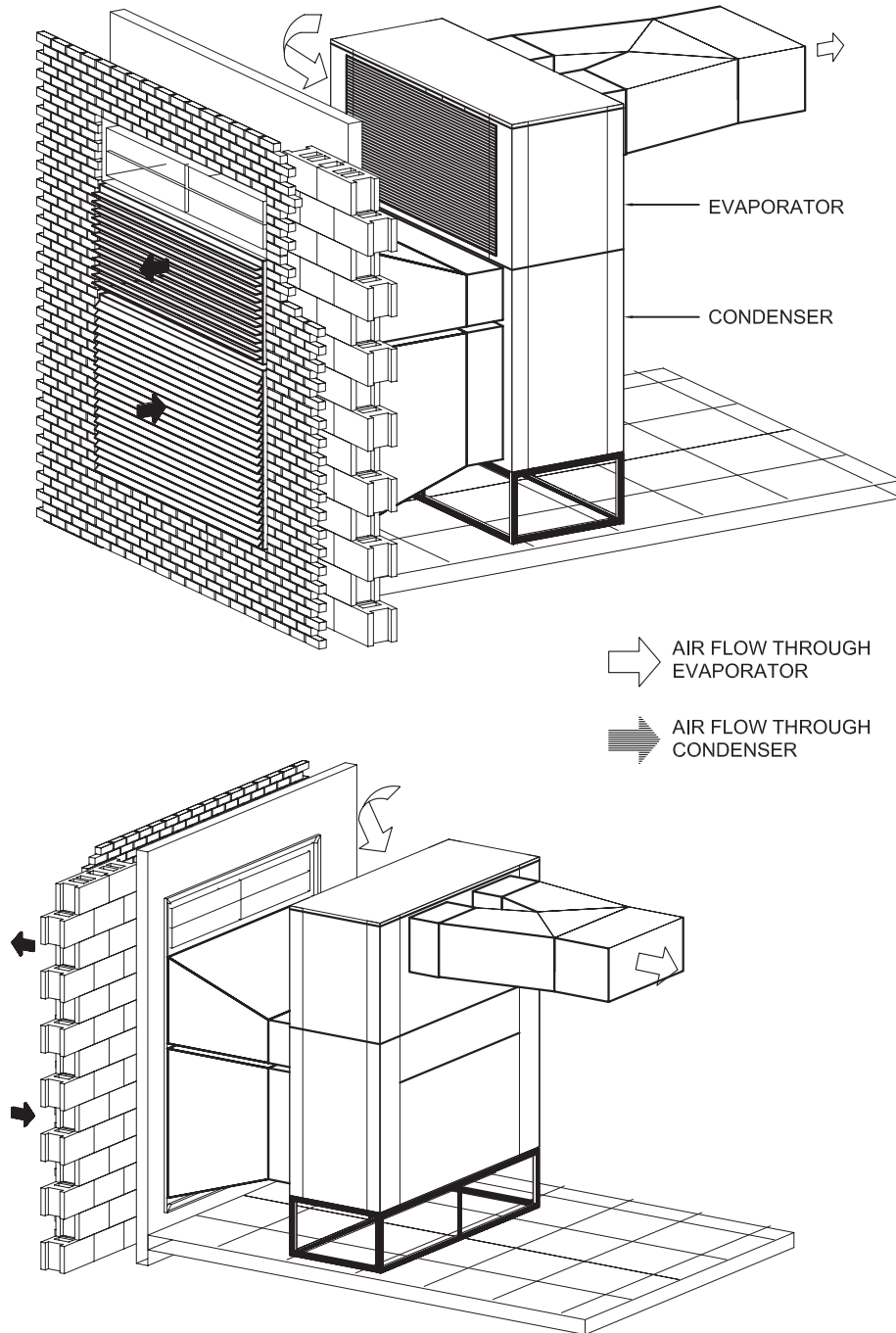
OPTIONAL BOTTOM & FRONT DAMPER ARRANGEMENT



HORIZONTAL UNIT MODEL NUMBER	ECONOMIZER MODEL NUMBER	MIXING BOX DIM'N			DAMPER DIM'N	
		A	B	C	D	E
DSH024B/036B	HASE-036B-BF	26.06	23.32	23.44	17.00	14.00
DSH048B/060B	HASE-060B-BF	29.68	23.44	30.44	24.00	14.00
DSH096B	HASE-100B-BF	33.63	25.25	33.63	28.00	19.50

CONTROL MODULE	
F	G
8.00	15.00
8.00	15.00
8.00	15.00

VERTICAL APPLICATION & INSTALLATION



DSV PHYSICAL DATA

VERTICAL AIR-COOLED - DSV SERIES R-410A

Model	DSV060B	DSV096B	DSV120B	DSV144B	DSV180B	DSV240B
Nominal Cooling (Tons)	5	8	10	12	15	20
Refrigerant	R410A	R410A	R410A	R410A	R410A	R410A

COOLING PERFORMANCE

Gross Cooling Capacity (Btu/h)	62,000	97,000	123,000	149,000	181,000	251,000
Net Cooling Capacity (Btu/h)	60,000	95,000	120,000	144,000	170,000	244,000
Design Airflow (CFM)	2,000	3,200	4,000	4,800	6,000	8,000
Net Cooling Airflow (CFM)	1,800	3,200	3,800	4,400	5,600	7,200
SEER	14	12	11.7	11.6	11.2	10.5
IEER	-	12.6	12.3	12	11.6	10.7
Compressor - Qty/Type - Model	1/Scroll ZP51K5E	2/Scroll ZP39K5E	2/Scroll ZP51K5E	2/Scroll ZP61KCE	2/Scroll ZP72KCE	2/Scroll ZP103KCE

EVAPORATOR COIL

Type	Enhanced Copper Tubes, Enhanced Aluminum Fins					
Dimension - Height x Width (in)	26x46	34x64	34x65	34X75	34X76	39x84
Face Area (sq ft)	8.26	15.11	15.35	17.71	17.94	22.75
Rows/FPI	4/16	4/14	5/14	4/14	5/14	5/14
Filters - Quantity/Size (in)	4-25x14x2	4-24x18x2 2-20x18x2	4-24x18x2 2-20x18x2	8-20x18x2	8-20x18x2	4-24x20x2 4-20x20x2

CONDENSER COIL

Type	Enhanced Copper Tubes, Enhanced Aluminum Fins					
Dimension - Height x Width (in)	34x46	34x65	34x65	38X76	38X76	44x84
Face Area (sq ft)	10.80	15.35	15.35	20.05	20.05	24.44
Rows/FPI	5/16	4/14	5/14	4/14	5/14	5/14

EVAPORATOR FAN

Type	Centrifugal, Forward Curved					
Qty - Diameter x Width (in)	12x9	2-12x9	2-12x9	2-15X11	2-15X11	2-15x15
Drive	Adjustable Belt					
Motor HP (Oversized)	1 (1.5)	1 (1.5)	1.5 (2)	2 (3)	3 (5)	5 (7.5)

CONDENSER FAN

Type	Centrifugal, Forward Curved					
Qty - Diameter x Width (in)	12x9	2-15x11	2-15x11	2-15x15	2-15x15	3-15x11
Drive	Adjustable Belt					
Motor HP	1.5	2	3	3	5	7.5

Dimensions	- Height (in)	76.5	88.0	88.0	91.5	91.5	102.0
	- Width (in)	52.0	71.5	71.5	82.5	82.5	90.5
	- Depth (in)	29.0	32.5	32.5	34.0	34.0	34.0
Weight	- Operating (lbs)	920	1,240	1,325	1,560	1,655	1,875
	- Shipping (lbs)	980	1,290	1,385	1,645	1,740	1,960

- Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F wet bulb and CFM listed. Gross capacity does not include the effect of fan motor heat.
- Rated and certified in accordance with ANSI/AHRI Standard 210/240
- Rated and certified in accordance with ANSI/AHRI Standard 340/360

DSV PERFORMANCE DATA

DSV060B		SCFM	1600			1800			2000			2200			2400				
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F		
Ambient Condenser Air Temperature	EDB	EWB																	
		TC	52.1	53.9	55.7	53.4	55.7	58.1	55.0	57.6	60.2	56.3	59.1	61.8	57.7	60.5	63.4		
	85°F	57°F	SC	50.7	53.2	55.7	53.4	55.7	58.1	55.0	57.6	60.2	56.3	59.1	61.8	57.7	60.5	63.4	
			kW	3.47	3.49	3.52	3.48	3.52	3.55	3.50	3.54	3.58	3.52	3.56	3.61	3.54	3.59	3.63	
			TC	56.1	57.1	58.0	57.8	58.9	60.1	59.7	61.0	62.3	60.6	62.0	63.4	61.6	63.0	64.4	
	62°F	57°F	SC	44.0	48.7	53.4	46.0	51.1	56.3	47.4	53.4	59.3	48.8	55.2	61.6	50.2	57.1	63.9	
			kW	3.53	3.54	3.55	3.55	3.56	3.58	3.57	3.59	3.61	3.59	3.61	3.63	3.61	3.63	3.65	
			TC	60.1	60.2	61.1	62.0	62.1	63.1	64.2	64.4	65.3	64.8	64.9	65.9	65.3	65.4	66.4	
	67°F	57°F	SC	36.4	43.2	50.0	37.6	45.6	53.5	38.9	48.2	57.4	40.4	50.4	60.4	41.8	52.6	63.4	
			kW	3.58	3.58	3.58	3.61	3.61	3.61	3.64	3.64	3.64	3.65	3.65	3.65	3.67	3.67	3.67	
			TC	65.1	65.3	66.2	66.5	66.7	67.7	67.9	68.0	69.0	68.6	68.7	69.8	69.4	69.5	70.5	
	72°F	57°F	SC	30.4	36.1	41.7	31.2	37.7	44.2	32.6	39.6	46.6	33.2	40.6	48.9	34.3	41.6	51.2	
			kW	3.66	3.66	3.66	3.69	3.69	3.69	3.71	3.71	3.71	3.72	3.72	3.72	3.74	3.74	3.74	
			TC	50.0	52.1	54.2	51.7	54.0	56.4	53.2	55.8	58.5	54.6	57.3	60.0	55.9	58.7	61.5	
	95°F	57°F	SC	49.4	51.8	54.2	51.7	54.0	56.4	53.2	55.8	58.5	54.6	57.3	60.0	55.9	58.7	61.5	
			kW	3.94	3.97	4.00	3.96	4.00	4.03	3.98	4.02	4.06	4.00	4.05	4.09	4.03	4.07	4.12	
			TC	54.2	55.3	56.3	55.9	57.1	58.3	57.6	58.9	60.3	58.6	59.9	61.3	59.6	61.0	62.4	
		62°F	57°F	SC	42.8	47.5	52.2	44.6	49.8	55.1	46.0	51.9	57.8	47.5	53.8	60.2	48.9	55.8	62.6
				kW	4.01	4.02	4.03	4.03	4.05	4.07	4.05	4.07	4.09	4.07	4.09	4.11	4.09	4.11	4.13
				TC	58.4	58.4	58.4	60.1	60.1	60.1	62.0	62.0	62.0	62.6	62.6	62.6	63.2	63.2	63.2
		67°F	57°F	SC	35.4	42.3	49.1	36.6	44.7	52.7	37.9	47.0	56.1	39.4	49.4	59.4	40.8	51.8	62.7
				kW	4.07	4.07	4.07	4.10	4.10	4.10	4.13	4.13	4.13	4.14	4.14	4.14	4.15	4.15	4.15
				TC	62.9	63.0	63.9	64.1	64.3	65.2	64.5	64.6	65.6	66.1	66.3	67.3	67.8	67.9	68.9
		72°F	57°F	SC	29.5	35.2	40.9	30.1	36.7	43.3	30.9	38.3	45.7	31.7	39.5	48.0	32.7	40.7	50.2
				kW	4.14	4.14	4.14	4.17	4.17	4.17	4.18	4.18	4.18	4.21	4.21	4.21	4.24	4.24	4.24
				TC	48.0	50.4	52.7	49.9	52.3	54.8	51.4	54.1	56.8	52.8	55.5	58.2	54.2	56.9	59.6
	105°F	57°F	SC	48.0	50.4	52.7	49.9	52.3	54.8	51.4	54.1	56.8	52.8	55.5	58.2	54.2	56.9	59.6	
			kW	4.41	4.44	4.48	4.44	4.47	4.51	4.45	4.50	4.55	4.48	4.53	4.58	4.52	4.56	4.60	
			TC	52.3	53.5	54.6	54.0	55.2	56.4	55.5	56.9	58.2	56.5	57.9	59.3	57.6	58.9	60.3	
		62°F	57°F	SC	41.7	46.3	50.9	43.2	48.5	53.9	44.6	50.5	56.3	46.1	52.5	58.8	47.5	54.4	61.3
				kW	4.49	4.50	4.52	4.51	4.53	4.55	4.53	4.56	4.58	4.55	4.58	4.60	4.58	4.60	4.62
				TC	56.5	56.6	57.4	58.0	58.1	59.0	59.5	59.6	60.5	60.2	60.3	61.2	60.8	61.0	61.9
		67°F	57°F	SC	34.5	41.4	48.3	35.7	43.8	52.0	36.9	45.8	54.7	38.4	48.4	58.4	39.9	50.9	62.0
				kW	4.56	4.56	4.56	4.59	4.59	4.59	4.61	4.61	4.61	4.62	4.62	4.62	4.64	4.64	4.64
				TC	60.6	60.7	61.6	61.2	61.3	62.2	61.8	61.9	62.8	63.7	63.8	64.8	66.2	66.3	67.3
		72°F	57°F	SC	28.2	34.3	40.0	28.7	35.7	42.4	29.2	37.0	44.8	30.2	38.4	47.0	31.4	39.9	49.3
				kW	4.62	4.62	4.62	4.65	4.65	4.65	4.65	4.65	4.65	4.70	4.70	4.70	4.75	4.75	4.75
				TC	46.7	48.9	51.2	48.1	50.6	53.1	49.6	52.4	55.1	51.0	53.7	56.5	52.5	55.1	57.8
	115°F	57°F	SC	46.7	48.9	51.2	48.1	50.6	53.1	49.6	52.4	55.1	51.0	53.7	56.5	52.5	55.1	57.8	
			kW	4.88	4.92	4.96	4.91	4.95	4.99	4.93	4.98	5.03	4.96	5.01	5.06	5.00	5.04	5.09	
			TC	50.4	51.7	53.0	52.1	53.4	54.6	53.4	54.8	56.2	54.5	55.9	57.2	55.6	56.9	58.3	
		62°F	57°F	SC	40.0	45.1	49.7	41.8	47.2	52.6	43.2	49.0	54.8	44.7	51.1	57.4	46.2	53.1	58.6
				kW	4.96	4.98	5.00	5.00	5.02	5.04	5.01	5.04	5.06	5.04	5.06	5.08	5.06	5.08	5.10
				TC	54.7	54.8	55.6	56.0	56.1	56.9	57.1	57.2	58.1	57.9	58.0	58.9	58.6	58.7	59.6
		67°F	57°F	SC	33.6	40.5	47.4	34.7	42.9	51.2	36.0	44.7	53.4	37.5	47.4	57.3	39.0	50.1	60.6
				kW	5.05	5.05	5.05	5.08	5.08	5.08	5.10	5.10	5.10	5.11	5.11	5.11	5.12	5.12	5.12
				TC	58.3	58.4	59.3	57.8	57.9	58.8	59.4	59.5	60.4	61.2	61.3	62.2	64.6	64.7	65.7
		72°F	57°F	SC	27.6	33.3	39.1	27.6	34.6	41.5	27.8	35.7	43.8	28.5	37.3	46.1	29.4	38.8	48.3
kW				5.11	5.11	5.11	5.13	5.13	5.13	5.12	5.12	5.12	5.18	5.18	5.18	5.25	5.25	5.25	

DSV PERFORMANCE DATA

DSV096B			SCFM	2600			2900			3200			3500			3800		
			EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F
Ambient Condenser Air Temperature	85°F	EDB																
		EWB																
	57°F	TC	82.1	86.9	91.6	84.8	90.2	95.5	87.5	93.5	99.4	90.0	95.8	101.5	92.6	98.3	104.0	
		SC	82.1	86.9	91.6	84.8	90.2	95.5	87.5	93.5	99.4	90.0	95.8	101.5	92.6	98.3	104.0	
		kW	5.60	5.54	5.48	5.44	5.47	5.51	5.28	5.41	5.54	5.49	5.53	5.57	5.51	5.56	5.60	
	62°F	TC	89.9	92.2	94.6	92.2	94.9	97.5	94.6	97.5	100.5	96.5	99.3	102.2	98.3	101.1	104.0	
		SC	66.6	74.5	82.4	69.5	78.2	86.9	72.3	81.9	91.4	74.2	83.9	94.5	75.7	87.0	98.2	
		kW	5.48	5.49	5.53	5.52	5.54	5.55	5.52	5.54	5.58	5.56	5.58	5.60	5.57	5.60	5.62	
	67°F	TC	97.4	97.6	99.1	99.4	99.6	101.1	101.4	101.6	103.1	102.7	102.9	104.5	103.7	103.9	105.5	
		SC	54.8	66.1	77.4	58.0	70.3	82.7	60.1	74.6	88.0	61.6	76.4	92.1	63.1	80.1	97.1	
		kW	5.58	5.58	5.58	5.60	5.60	5.60	5.62	5.62	5.62	5.63	5.63	5.63	5.64	5.64	5.64	
	72°F	TC	106.6	106.8	108.4	110.2	110.4	112.1	113.8	114.0	115.7	111.7	111.9	113.6	112.6	112.8	114.5	
		SC	46.9	57.5	64.2	48.8	59.5	68.0	51.2	61.4	71.7	52.0	63.4	74.8	53.0	65.1	78.3	
		kW	5.63	5.63	5.63	5.78	5.78	5.78	5.93	5.93	5.93	5.68	5.68	5.68	5.70	5.70	5.70	
	95°F	57°F	TC	78.9	83.6	88.4	81.8	86.9	92.0	84.7	90.2	95.7	86.5	92.1	97.6	88.9	94.5	98.7
			SC	78.9	83.6	88.4	81.8	86.9	92.0	84.7	90.2	95.7	86.5	92.1	97.6	88.9	94.5	98.7
			kW	6.32	6.38	6.42	6.42	6.43	6.43	6.43	6.43	6.47	6.47	6.48	6.51	6.52	6.54	6.57
		62°F	TC	86.1	88.4	90.8	88.5	91.0	93.6	90.9	93.6	96.3	92.3	95.0	97.8	93.9	96.8	99.6
			SC	63.7	71.9	80.0	66.6	75.4	84.3	69.5	79.0	88.6	70.7	81.2	91.7	72.8	83.7	94.5
			kW	6.45	6.47	6.49	6.49	6.49	6.49	6.50	6.51	6.51	6.54	6.54	6.54	6.56	6.57	6.59
		67°F	TC	93.0	93.2	94.6	94.9	95.1	96.5	96.8	97.0	98.5	97.8	98.0	99.4	98.8	99.0	100.5
			SC	52.1	63.9	75.7	55.2	68.0	80.7	58.2	72.0	85.8	58.7	74.5	90.3	60.9	77.2	93.4
			kW	6.54	6.54	6.54	6.56	6.56	6.56	6.58	6.58	6.58	6.59	6.59	6.59	6.61	6.61	6.61
		72°F	TC	101.8	102.0	103.5	103.9	104.1	105.7	106.0	106.3	107.9	106.2	106.4	108.0	107.0	107.2	108.8
			SC	48.3	55.4	62.5	49.3	57.6	66.0	50.2	59.9	69.6	49.1	61.0	73.0	48.6	62.5	76.4
			kW	6.61	6.61	6.61	6.67	6.67	6.67	6.68	6.68	6.68	6.74	6.74	6.74	6.75	6.75	6.75
	105°F	57°F	TC	75.8	80.4	85.1	78.8	83.7	88.6	81.9	86.9	92.0	83.1	88.4	92.7	85.1	90.7	94.7
			SC	75.8	80.4	85.1	78.8	83.7	88.6	81.9	86.9	92.0	83.1	88.4	92.7	85.1	90.7	94.7
			kW	7.26	7.32	7.38	7.31	7.37	7.43	7.36	7.42	7.48	7.37	7.44	7.51	7.43	7.49	7.55
		62°F	TC	82.3	84.6	87.0	84.7	87.2	89.6	87.2	89.7	92.2	88.1	90.7	93.4	89.6	92.4	93.7
			SC	60.9	69.3	77.6	63.8	72.7	81.6	66.7	76.2	85.7	68.1	78.5	88.9	69.9	80.4	89.4
			kW	7.38	7.41	7.44	7.42	7.45	7.48	7.45	7.48	7.51	7.46	7.50	7.53	7.50	7.53	7.56
		67°F	TC	88.8	88.8	88.8	90.6	90.6	90.6	92.4	92.4	92.4	93.0	93.0	93.0	94.1	94.1	94.1
			SC	49.5	61.8	74.0	52.4	65.6	78.8	55.2	69.4	83.6	56.9	72.6	88.4	58.7	74.3	89.8
			kW	7.50	7.50	7.50	7.52	7.52	7.52	7.54	7.54	7.54	7.56	7.56	7.56	7.57	7.57	7.57
		72°F	TC	97.0	97.2	98.6	97.6	97.8	99.3	98.3	98.5	100.0	100.8	101.0	102.5	101.4	101.6	103.1
SC			43.9	53.3	60.8	46.1	55.8	64.1	46.8	57.1	67.4	48.3	58.7	71.2	48.8	59.8	74.4	
kW			7.55	7.55	7.55	7.57	7.57	7.57	7.59	7.59	7.59	7.66	7.66	7.66	7.79	7.79	7.79	
115°F	57°F	TC	72.6	77.2	81.9	75.8	80.5	85.1	79.1	83.7	87.8	79.6	84.7	88.7	81.3	86.9	90.4	
		SC	72.6	77.2	81.9	75.8	80.5	85.1	79.1	83.7	87.8	79.6	84.7	88.7	81.3	86.9	90.4	
		kW	8.10	8.21	8.33	8.25	8.32	8.39	8.31	8.43	8.46	8.34	8.46	8.48	8.40	8.49	8.52	
	62°F	TC	78.5	80.8	83.2	81.0	83.3	85.6	83.5	85.8	88.1	83.9	86.4	88.9	85.3	88.1	90.3	
		SC	58.1	66.7	75.2	61.0	70.0	79.0	63.9	73.3	82.8	65.5	75.8	84.8	67.0	77.1	86.2	
		kW	8.28	8.34	8.39	8.37	8.40	8.44	8.45	8.47	8.48	8.41	8.46	8.50	8.47	8.50	8.53	
	67°F	TC	84.3	84.4	85.7	86.0	86.2	87.5	87.7	87.9	89.2	87.9	88.1	89.4	89.1	89.3	90.6	
		SC	46.9	59.6	72.3	49.6	63.2	76.8	52.3	66.8	81.4	55.0	70.8	86.5	56.5	72.3	86.2	
		kW	8.46	8.46	8.46	8.48	8.48	8.48	8.50	8.50	8.50	8.52	8.52	8.52	8.54	8.54	8.54	
	72°F	TC	92.1	92.3	93.7	91.3	91.5	92.9	90.5	90.7	92.1	95.4	95.5	97.0	95.8	95.9	97.4	
		SC	43.3	51.2	59.1	45.8	54.0	62.2	48.4	56.8	65.3	51.7	56.3	69.4	52.5	57.2	72.5	
		kW	8.36	8.36	8.36	8.46	8.46	8.46	8.56	8.56	8.56	8.65	8.65	8.65	8.84	8.84	8.84	

DSV120B			SCFM	3200			3600			4000			4400			4800		
			EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F
Ambient Condenser Air Temperature	EDB	EWB																
	85°F	57°F	TC	105.1	110.8	116.5	109.2	115.5	121.7	113.2	120.1	126.9	116.3	122.9	129.5	118.8	125.8	132.8
			SC	104.7	110.6	116.5	109.2	115.5	121.7	113.6	120.3	126.9	116.3	122.9	129.5	118.8	125.8	132.8
			kW	6.96	6.75	6.86	6.91	6.93	6.96	6.98	6.99	7.02	7.03	7.04	7.07	7.07	7.16	7.23
		62°F	TC	114.9	117.8	120.6	118.1	121.3	124.4	121.3	124.7	128.2	124.0	127.3	130.6	126.0	129.5	133.0
			SC	88.5	98.8	109.1	92.6	103.9	115.1	96.8	109.0	121.1	98.2	112.1	126.0	101.2	116.1	130.9
			kW	6.83	6.89	6.94	6.95	6.95	6.96	6.97	7.04	7.04	7.06	7.07	7.07	7.08	7.12	7.13
	67°F	TC	124.2	124.5	124.8	126.7	127.0	127.3	129.1	129.4	129.5	131.5	131.8	132.0	132.8	133.0	133.2	
		SC	72.3	87.0	101.7	76.1	92.3	108.5	79.9	97.6	115.4	80.1	101.3	122.4	83.6	106.3	129.0	
		kW	6.92	6.92	6.92	6.96	6.96	6.96	7.00	7.00	7.00	7.10	7.10	7.10	7.11	7.11	7.11	
	72°F	TC	134.9	135.1	135.3	138.2	138.4	138.6	141.5	141.8	142.0	142.4	142.7	142.9	144.2	144.6	144.9	
		SC	61.3	76.1	84.6	63.1	76.3	89.4	64.6	76.4	94.3	66.7	82.4	100.2	70.0	84.4	104.6	
		kW	7.22	7.07	7.07	7.07	7.15	7.15	7.15	7.15	7.22	7.22	7.25	7.25	7.25	7.64	7.64	7.64
	95°F	57°F	TC	100.9	106.6	112.3	104.8	111.0	117.2	108.6	115.4	122.1	111.4	117.9	124.5	113.9	120.8	125.7
			SC	100.7	106.5	112.3	104.8	111.0	117.2	108.8	115.5	122.1	111.4	117.9	124.5	113.9	120.8	125.7
			kW	7.98	7.99	8.00	8.02	8.09	8.16	8.06	8.20	8.33	8.19	8.20	8.20	8.16	8.21	8.27
		62°F	TC	110.1	113.0	115.8	113.1	116.2	119.3	116.0	119.4	122.8	118.3	121.6	124.9	120.3	123.8	126.3
			SC	86.3	96.5	106.8	90.0	101.4	112.9	93.6	106.3	119.0	95.7	109.6	123.5	98.8	113.1	126.0
			kW	8.07	8.07	8.07	8.11	8.15	8.19	8.16	8.23	8.30	8.25	8.26	8.26	8.24	8.27	8.30
		67°F	TC	119.0	119.3	119.4	120.8	121.1	121.4	122.5	123.0	123.4	124.5	125.0	125.3	126.1	126.4	126.8
			SC	70.8	85.5	100.2	74.1	90.7	107.4	77.3	96.0	114.7	78.9	100.0	121.2	82.5	104.2	125.5
			kW	8.15	8.15	8.15	8.21	8.21	8.21	8.26	8.26	8.26	8.32	8.32	8.32	8.33	8.33	8.33
		72°F	TC	128.5	128.9	129.3	131.1	131.6	132.2	134.1	134.5	135.0	135.5	135.8	136.0	137.5	137.8	138.0
			SC	58.2	72.7	83.3	59.3	74.2	88.1	61.4	75.7	92.9	62.9	80.9	98.9	66.2	89.8	103.1
			kW	8.35	8.35	8.35	8.38	8.38	8.38	8.40	8.40	8.40	8.48	8.48	8.48	8.69	8.69	8.69
	105°F	57°F	TC	96.7	102.4	108.0	100.3	106.5	112.7	104.0	110.7	116.4	106.4	113.0	118.9	109.0	115.7	122.5
			SC	96.7	102.4	108.0	100.3	106.5	112.7	104.0	110.7	116.3	106.4	113.0	118.9	109.0	115.7	122.5
			kW	9.00	9.10	9.12	9.21	9.22	9.22	9.24	9.29	9.32	9.33	9.34	9.40	9.43	9.44	9.50
		62°F	TC	105.4	108.2	111.0	108.0	111.1	114.2	110.7	114.0	117.4	112.6	115.9	119.1	114.7	118.1	123.2
			SC	83.1	93.3	103.4	86.3	97.9	109.5	89.5	102.6	115.7	92.2	105.9	119.7	95.3	109.0	122.7
			kW	9.19	9.25	9.32	9.28	9.34	9.40	9.36	9.42	9.48	9.37	9.43	9.48	9.42	9.47	9.52
		67°F	TC	113.2	113.6	114.0	114.7	115.2	115.7	116.4	117.0	117.7	118.7	119.2	119.6	120.4	121.5	124.2
			SC	68.5	83.1	97.7	71.2	88.2	105.2	73.9	93.3	112.8	76.8	97.7	118.7	80.4	101.1	122.0
			kW	9.39	9.39	9.39	9.45	9.45	9.45	9.51	9.51	9.51	9.53	9.53	9.53	9.55	9.55	9.55
		72°F	TC	123.5	123.5	123.5	125.5	125.9	126.2	127.7	128.1	128.4	128.9	129.3	129.7	130.7	131.2	131.6
			SC	55.8	68.5	81.2	56.8	71.3	85.8	57.8	74.1	90.5	60.3	78.5	96.7	65.5	93.6	100.5
			kW	9.58	9.58	9.58	9.61	9.61	9.61	9.63	9.63	9.63	9.71	9.71	9.71	9.74	9.74	9.74
	115°F	57°F	TC	92.5	98.1	103.8	95.9	102.0	108.2	99.3	105.9	111.3	101.5	108.0	111.3	104.1	110.7	115.1
			SC	92.7	98.2	103.8	95.9	102.0	108.2	99.1	105.8	111.3	101.5	108.0	111.3	104.1	110.7	115.1
			kW	10.02	10.25	10.49	10.19	10.35	10.52	10.36	10.45	10.55	10.24	10.45	10.66	10.43	10.58	10.73
		62°F	TC	100.6	103.4	106.2	103.0	106.0	109.1	105.4	108.7	111.4	106.9	110.1	112.4	109.1	112.4	115.7
			SC	79.2	89.1	99.0	81.8	93.4	105.1	84.5	97.8	110.2	87.8	101.2	111.7	90.8	103.8	114.4
			kW	10.32	10.44	10.56	10.44	10.53	10.61	10.56	10.61	10.66	10.50	10.60	10.70	10.60	10.68	10.75
		67°F	TC	107.7	108.3	108.6	109.4	109.6	110.0	111.2	111.4	111.8	112.2	112.4	112.6	113.8	114.6	116.4
			SC	65.6	79.9	94.2	67.7	84.8	101.9	69.8	89.8	107.8	74.0	94.5	109.1	77.6	96.9	113.7
			kW	10.63	10.63	10.63	10.70	10.70	10.70	10.75	10.75	10.75	10.77	10.77	10.77	10.77	10.77	10.77
		72°F	TC	116.5	117.0	117.7	119.2	119.4	119.8	121.1	121.4	121.6	122.1	122.3	122.5	123.3	123.5	123.7
SC			49.0	63.6	78.3	52.7	67.7	82.7	56.5	71.8	87.1	57.1	75.3	93.5	64.6	89.9	112.9	
kW			10.76	10.76	10.76	10.78	10.78	10.78	10.83	10.83	10.83	10.91	10.91	10.91	10.95	10.95	10.95	

DSV PERFORMANCE DATA

DSV144B			SCFM	4000			4400			4800			5200			5600		
			EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F
Ambient Condenser Air Temperature	EDB	EWB																
	85°F	57°F	TC	125.7	129.7	133.6	128.4	133.2	138.1	131.0	136.7	142.5	132.7	139.4	146.1	134.6	142.1	149.6
			SC	118.1	125.8	133.6	124.1	131.1	138.1	130.2	136.3	142.5	132.7	139.4	146.1	134.6	142.1	149.6
			kW	8.90	8.92	8.93	8.93	8.94	8.95	8.96	8.96	8.97	8.97	8.98	9.00	8.97	9.00	9.02
		62°F	TC	136.2	138.2	140.1	139.9	142.3	144.7	143.5	146.4	149.3	144.8	148.2	151.6	147.0	150.8	154.5
			SC	102.8	113.9	125.0	105.5	117.6	129.8	108.2	121.4	134.5	112.5	126.3	140.1	114.8	129.6	144.4
			kW	8.99	8.99	9.00	9.02	9.02	9.03	9.05	9.05	9.05	9.05	9.06	9.07	9.07	9.08	9.09
		67°F	TC	146.4	146.9	147.5	150.9	151.2	152.1	155.9	156.6	156.8	157.0	157.4	157.6	158.9	159.3	159.7
			SC	84.3	101.9	116.4	86.9	104.2	121.4	90.4	106.4	126.5	92.3	113.2	134.2	95.0	117.1	139.3
			kW	9.07	9.07	9.07	9.10	9.10	9.10	9.14	9.14	9.14	9.14	9.14	9.14	9.16	9.16	9.16
		72°F	TC	159.5	160.1	160.9	162.3	162.8	163.3	164.9	165.5	166.0	166.6	167.0	167.6	169.3	169.5	169.7
			SC	83.0	90.5	98.0	86.0	93.9	101.9	87.2	97.4	105.8	89.0	98.7	110.1	90.7	100.0	114.1
			kW	9.13	9.13	9.13	9.13	9.13	9.13	9.14	9.14	9.14	9.17	9.17	9.17	9.22	9.22	9.22
	95°F	57°F	TC	120.7	125.0	129.4	123.3	128.5	133.6	125.9	131.9	137.8	128.4	135.2	142.1	130.9	138.1	145.4
			SC	115.1	122.2	129.4	121.2	127.4	133.6	125.9	131.9	137.8	128.4	135.2	142.1	130.9	138.1	145.4
			kW	9.90	9.91	9.93	9.93	9.94	9.95	9.96	9.96	9.97	9.96	9.99	10.02	9.98	10.02	10.05
		62°F	TC	131.0	133.1	135.3	134.8	137.4	139.9	138.6	141.6	144.5	139.8	143.2	146.6	141.9	145.5	149.1
			SC	100.0	110.7	121.5	102.5	114.5	126.4	105.0	118.2	131.4	109.1	123.0	136.8	111.4	126.1	140.7
			kW	9.99	10.00	10.01	10.03	10.04	10.04	10.07	10.07	10.08	10.07	10.08	10.10	10.08	10.09	10.11
		67°F	TC	140.6	141.3	141.9	145.5	145.8	146.2	148.3	149.0	149.8	150.5	150.9	151.2	152.3	152.6	152.9
			SC	81.0	99.2	113.6	83.3	101.5	119.3	84.6	103.8	125.0	89.8	110.7	131.6	92.0	114.0	136.1
			kW	10.08	10.08	10.08	10.13	10.13	10.13	10.18	10.18	10.18	10.17	10.17	10.17	10.17	10.17	10.17
		72°F	TC	153.5	154.0	154.4	155.4	155.7	156.0	156.8	157.2	157.5	159.5	160.0	160.3	161.7	162.1	162.3
			SC	77.9	87.7	95.6	79.1	89.3	99.7	79.8	90.9	103.7	81.2	95.1	107.9	83.6	96.5	111.7
			kW	10.13	10.13	10.13	10.14	10.14	10.14	10.16	10.16	10.16	10.21	10.21	10.21	10.26	10.26	10.26
	105°F	57°F	TC	115.7	120.4	125.1	118.3	123.7	129.1	120.9	127.0	133.1	124.2	131.1	138.0	127.2	134.2	141.1
			SC	112.1	118.6	125.1	118.3	123.7	129.1	120.9	127.0	133.1	124.2	131.1	138.0	127.2	134.2	141.1
			kW	10.89	10.91	10.93	10.92	10.94	10.95	10.95	10.96	10.97	10.96	11.00	11.05	10.99	11.03	11.08
		62°F	TC	125.8	128.1	130.5	129.7	132.4	135.1	133.6	136.7	139.7	134.8	138.3	141.7	136.8	140.3	143.8
			SC	106.6	118.1	129.5	109.2	122.2	135.2	111.8	126.3	140.8	116.1	131.3	146.5	118.6	134.5	150.4
			kW	10.99	11.00	11.01	11.04	11.05	11.06	11.09	11.09	11.10	11.08	11.11	11.13	11.09	11.11	11.13
		67°F	TC	135.4	135.6	135.9	140.8	141.0	141.1	145.4	145.8	146.4	144.8	145.1	145.4	146.3	146.6	146.8
			SC	85.3	106.0	121.7	88.6	108.6	128.6	92.6	111.2	135.4	95.8	118.7	141.6	97.6	121.7	145.9
			kW	11.09	11.09	11.09	11.16	11.16	11.16	11.18	11.18	11.18	11.21	11.21	11.21	11.23	11.23	11.23
		72°F	TC	148.5	148.9	149.2	148.8	149.2	149.5	149.1	149.5	149.7	152.7	153.2	153.4	154.7	155.2	155.4
SC			73.7	90.8	102.4	76.6	93.0	107.0	79.1	93.8	111.6	84.9	100.5	116.1	86.2	103.1	119.9	
kW			11.19	11.12	11.12	11.12	11.15	11.15	11.15	11.15	11.19	11.19	11.25	11.25	11.25	11.30	11.30	
115°F	57°F	TC	110.6	115.7	120.9	113.3	119.0	124.6	115.9	122.2	128.4	119.9	126.9	133.9	123.5	130.2	136.9	
		SC	109.1	115.0	120.9	113.3	119.0	124.6	115.9	122.2	128.4	119.9	126.9	133.9	123.5	130.2	136.9	
		kW	11.88	11.91	11.93	11.91	11.93	11.95	11.95	11.96	11.97	11.95	12.01	12.07	12.00	12.05	12.11	
	62°F	TC	120.6	123.1	125.7	124.6	127.5	130.3	128.7	131.8	134.9	129.8	133.3	136.8	131.7	135.1	138.4	
		SC	103.5	114.6	125.7	106.0	118.7	131.5	108.4	122.8	137.3	112.3	127.6	142.9	114.9	130.6	146.3	
		kW	11.99	12.01	12.02	12.05	12.06	12.07	12.11	12.12	12.12	12.10	12.13	12.16	12.10	12.12	12.15	
	67°F	TC	130.1	130.5	130.7	135.6	136.0	136.2	141.1	141.5	141.7	139.2	139.7	139.9	139.5	139.9	140.1	
		SC	81.5	100.9	118.7	85.2	106.8	126.2	90.2	111.6	133.7	93.0	115.9	138.7	94.2	118.3	142.4	
		kW	12.11	12.11	12.11	12.19	12.19	12.19	12.20	12.20	12.20	12.24	12.24	12.24	12.27	12.27	12.27	
	72°F	TC	143.0	143.4	143.6	142.0	142.5	142.7	141.1	141.5	141.8	145.7	146.1	146.3	147.5	148.0	148.2	
		SC	73.8	85.1	99.8	74.6	88.0	104.5	75.6	90.9	109.3	79.5	96.6	113.6	83.2	100.2	117.3	
		kW	12.11	12.11	12.11	12.16	12.16	12.16	12.22	12.22	12.22	12.29	12.29	12.29	12.34	12.34	12.34	

DSV180B		SCFM	4800			5400			5600			6000			6600			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
Ambient Condenser Air Temperature	EDB	EWB																
		TC	155.9	163.6	171.3	162.4	170.0	177.7	164.7	172.5	180.4	167.4	175.5	183.5	171.5	179.8	188.1	
	SC	155.9	163.6	171.3	162.4	170.0	177.7	164.7	172.5	180.4	167.4	175.5	183.5	171.5	179.8	188.1		
	85°F	57°F	kW	10.78	10.92	11.06	10.88	11.03	11.18	10.93	11.07	11.22	10.97	11.13	11.28	11.04	11.20	11.36
			TC	169.6	173.5	177.3	175.6	179.4	183.3	176.9	180.8	184.8	179.3	183.3	187.3	182.9	187.1	191.2
			SC	131.4	146.8	162.2	136.7	153.9	171.1	137.3	155.9	174.4	141.4	160.3	179.3	147.5	167.1	186.7
		62°F	kW	11.05	11.12	11.19	11.14	11.22	11.29	11.17	11.24	11.32	11.21	11.28	11.36	11.26	11.34	11.42
			TC	183.0	183.4	183.6	188.5	188.8	189.1	188.8	189.1	189.4	190.8	191.2	191.5	193.9	194.3	194.6
			SC	106.9	130.0	153.2	111.0	137.7	164.4	113.1	139.2	168.5	115.3	145.2	175.2	123.4	154.3	185.2
	67°F	kW	11.32	11.32	11.32	11.40	11.40	11.40	11.41	11.41	11.41	11.44	11.44	11.44	11.48	11.48	11.48	
		TC	197.2	197.6	197.9	200.2	200.6	200.9	203.6	204.0	204.3	205.1	205.6	205.9	207.5	207.9	208.2	
		SC	89.0	111.6	127.2	92.6	113.2	133.8	93.3	114.0	134.7	95.6	118.1	140.6	99.1	124.3	149.5	
	72°F	kW	11.52	11.52	11.52	11.58	11.58	11.58	11.62	11.62	11.62	11.65	11.65	11.65	11.71	11.71	11.71	
		TC	150.4	157.9	165.3	156.3	163.5	170.8	158.1	165.8	173.5	160.8	168.5	176.1	164.9	172.5	180.0	
		SC	150.4	157.9	165.3	156.3	163.5	170.8	158.1	165.8	173.5	160.8	168.5	176.1	164.9	172.5	180.0	
	95°F	57°F	kW	12.08	12.21	12.33	12.18	12.31	12.43	12.25	12.36	12.48	12.28	12.40	12.53	12.32	12.46	12.61
			TC	163.2	166.9	170.6	168.2	171.8	175.4	169.6	173.4	177.2	171.9	175.7	179.5	175.4	179.2	183.0
			SC	128.0	143.4	158.8	133.2	150.1	167.1	134.6	153.1	171.6	138.1	156.7	175.2	143.3	162.0	180.6
		62°F	kW	12.33	12.40	12.46	12.42	12.49	12.55	12.44	12.49	12.55	12.48	12.54	12.60	12.54	12.61	12.68
			TC	175.6	176.0	176.2	179.7	180.1	180.3	180.6	181.0	181.3	182.6	183.0	183.3	185.6	186.0	186.2
			SC	104.2	127.5	150.8	108.7	135.4	162.0	109.8	139.0	168.2	114.0	143.4	172.8	120.3	150.0	179.7
	67°F	kW	12.59	12.59	12.59	12.66	12.66	12.66	12.63	12.63	12.63	12.68	12.68	12.68	12.76	12.76	12.76	
		TC	188.3	188.7	189.0	191.8	192.2	192.5	194.6	195.0	195.3	196.1	196.4	196.7	198.3	198.7	198.9	
		SC	84.5	108.8	124.9	88.8	111.5	132.3	90.3	111.9	133.5	92.2	115.6	139.0	95.2	121.2	147.2	
	72°F	kW	12.78	12.78	12.78	12.84	12.84	12.84	12.87	12.87	12.87	12.90	12.90	12.90	12.96	12.96	12.96	
		TC	144.9	152.1	159.3	150.2	157.0	163.9	151.6	159.1	166.6	154.3	161.5	168.7	158.3	165.1	171.9	
		SC	144.9	152.1	159.3	150.2	157.0	163.9	151.6	159.1	166.6	154.3	161.5	168.7	158.3	165.1	171.9	
	105°F	57°F	kW	13.38	13.50	13.61	13.48	13.58	13.68	13.57	13.65	13.73	13.58	13.68	13.78	13.60	13.73	13.85
			TC	156.8	160.4	164.0	160.7	164.2	167.6	162.2	166.0	169.7	164.5	168.1	171.7	167.9	171.4	174.8
			SC	122.4	137.5	152.6	127.3	143.9	160.4	129.7	147.8	165.8	132.5	150.3	168.1	136.8	154.2	171.5
		62°F	kW	13.62	13.68	13.74	13.71	13.76	13.81	13.70	13.75	13.79	13.75	13.80	13.85	13.82	13.88	13.94
			TC	168.6	168.6	168.6	171.3	171.3	171.3	172.9	172.9	172.9	174.8	174.8	174.8	177.6	177.6	177.6
			SC	99.8	122.9	146.0	104.5	130.7	156.9	107.8	136.5	165.1	110.8	139.2	167.5	115.3	143.2	171.2
	67°F	kW	13.86	13.86	13.86	13.93	13.93	13.93	13.84	13.84	13.84	13.92	13.92	13.92	14.03	14.03	14.03	
		TC	179.5	179.9	180.1	183.5	183.9	184.1	185.6	186.0	186.2	187.0	187.3	187.6	189.1	189.4	189.7	
		SC	84.6	104.1	120.5	87.5	108.0	128.5	87.8	107.9	130.1	89.3	111.2	135.0	90.6	116.0	142.5	
72°F	kW	14.03	14.03	14.03	14.10	14.10	14.10	14.11	14.11	14.11	14.16	14.16	14.16	14.22	14.22	14.22		
	TC	139.4	146.4	153.3	144.1	150.5	156.9	145.0	152.3	159.6	147.7	154.5	161.3	151.6	157.7	164.3		
	SC	139.4	146.4	153.3	144.1	150.5	156.9	145.0	152.3	159.6	147.7	154.5	161.3	151.6	157.7	164.3		
115°F	57°F	kW	14.68	14.79	14.89	14.78	14.86	14.94	14.89	14.94	14.99	14.88	14.96	15.03	14.88	14.99	15.10	
		TC	150.3	153.8	157.3	153.3	156.5	159.7	154.9	158.5	162.2	157.1	160.5	163.9	160.4	163.5	166.5	
		SC	117.8	132.8	147.8	122.7	138.9	155.1	125.9	143.7	161.5	128.1	145.3	162.5	131.4	147.7	164.0	
	62°F	kW	14.91	14.96	14.97	14.99	15.00	15.01	15.02	15.02	15.03	15.06	15.06	15.09	15.09	15.15	15.20	
		TC	160.9	161.2	161.5	162.2	162.5	162.8	164.4	164.7	165.0	166.2	166.5	166.8	168.9	169.2	169.5	
		SC	96.3	119.3	142.3	101.2	127.2	153.2	106.8	135.1	163.4	108.5	136.1	163.7	111.2	137.7	164.2	
67°F	kW	15.06	15.06	15.06	15.13	15.13	15.13	15.16	15.16	15.16	15.19	15.19	15.19	15.31	15.31	15.31		
	TC	170.7	171.0	171.3	175.1	175.5	175.8	176.6	176.9	177.2	177.9	178.2	178.5	179.9	180.2	180.5		
	SC	81.4	100.3	117.1	82.0	103.4	125.9	83.0	104.9	127.8	84.2	107.7	132.3	84.9	111.9	139.0		
72°F	kW	15.29	15.29	15.29	15.36	15.36	15.36	15.36	15.36	15.36	15.41	15.41	15.41	15.48	15.48	15.48		

DSV FAN PERFORMANCE DATA

EVAPORATOR FAN PERFORMANCE

MODEL #	SUPPLY CFM	AVAILABLE EXTERNAL STATIC PRESSURE - Inches W.C. ¹																			
		0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSV060B	1600	408	0.13	555	0.29	652	0.38	739	0.45	819	0.54	893	0.63	963	0.71	1029	0.81	-	-	-	-
	1800	459	0.20	600	0.39	689	0.48	770	0.58	846	0.66	917	0.76	984	0.86	1047	0.96	-	-	-	-
	2000	510	0.25	647	0.51	729	0.61	806	0.71	877	0.81	944	0.92	1008	1.00	1069	1.14	-	-	-	-
	2200	561	0.35	695	0.65	772	0.76	843	0.88	911	0.99	975	1.10	1036	1.23	1094	1.34	-	-	-	-
	2400	612	0.45	745	0.83	816	0.95	883	1.07	947	1.19	1008	1.31	1066	1.44	-	-	-	-	-	-
DSV096B	2600	496	0.28	605	0.40	701	0.50	788	0.62	868	0.74	947	0.89	1016	1.04	1045	1.19	1075	1.35	1105	1.50
	2900	514	0.36	618	0.48	710	0.60	794	0.72	872	0.86	944	0.98	1017	1.12	1075	1.28	1128	1.42	~	~
	3200	538	0.44	636	0.58	725	0.70	806	0.84	881	0.98	952	1.12	1018	1.26	1081	1.42	-	-	-	-
	3500	571	0.56	664	0.70	748	0.84	826	0.98	898	1.14	967	1.28	1031	1.44	-	-	-	-	-	-
	3800	613	0.70	700	0.86	779	1.00	853	1.16	923	1.32	989	1.48	-	-	-	-	-	-	-	-
DSV120B	3200	573	0.48	668	0.62	754	0.76	833	0.88	906	1.02	975	1.18	1040	1.32	1102	1.48	1160	1.66	1225	1.86
	3600	621	0.66	708	0.80	788	0.96	863	1.10	933	1.26	999	1.42	1061	1.58	1121	1.74	1178	1.90	-	-
	4000	667	0.86	748	1.02	823	1.18	893	1.34	960	1.52	1023	1.68	1083	1.86	1141	2.04	-	-	-	-
	4400	723	1.12	797	1.28	868	1.46	934	1.64	997	1.84	1057	2.02	-	-	-	-	-	-	-	-
DSV144B	4800	775	1.40	845	1.60	911	1.80	973	2.00	-	-	-	-	-	-	-	-	-	-	-	
	4000	436	0.48	521	0.64	597	0.80	667	0.98	730	1.16	790	1.34	845	1.54	896	1.75	946	2.01	992	2.29
	4400	456	0.58	536	0.76	609	0.94	676	1.12	738	1.32	796	1.52	851	1.72	902	1.82	950	2.17	996	2.52
	4800	475	0.70	555	0.88	621	1.08	686	1.28	746	1.48	803	1.70	857	1.92	908	2.14	956	2.36	1000	2.70
	5200	494	0.84	567	1.04	634	1.24	697	1.46	755	1.68	811	1.90	863	2.12	913	2.36	961	2.60	1007	2.84
DSV180B	5600	517	1.00	587	1.22	651	1.44	711	1.66	768	1.90	822	2.14	873	2.38	922	2.62	969	2.86	-	-
	4800	529	0.84	601	1.02	667	1.22	729	1.42	786	1.64	841	1.84	893	2.06	942	2.28	987	2.54	1037	2.78
	5400	580	1.14	646	1.36	707	1.58	764	1.80	819	2.02	870	2.26	920	2.50	967	2.74	1012	2.98	1056	3.24
	6000	610	1.42	671	1.66	729	1.90	783	2.14	835	2.40	885	2.64	933	2.90	979	3.16	1023	3.44	1066	3.70
	6600	702	2.04	757	2.30	809	2.56	858	2.84	906	3.10	952	3.38	996	3.66	1039	3.96	1080	4.24	1121	4.54
DSV240B	7200	760	2.62	810	2.90	858	3.18	905	3.48	950	3.78	993	4.08	1035	4.38	1076	4.68	1116	5.00	-	-
	6400	592	1.38	659	1.63	721	1.96	779	2.26	835	2.58	888	2.88	942	3.02	1001	3.38	1058	3.76	1101	4.18
	7200	645	1.88	706	2.18	770	2.50	818	2.84	870	3.18	920	3.52	965	3.88	1014	4.24	1065	4.61	1113	4.98
	8000	698	2.46	769	2.80	808	3.14	858	3.50	907	3.88	954	4.26	1000	4.64	1044	5.02	1087	5.42	1128	5.82
	8800	756	3.20	808	3.56	858	3.96	905	4.34	951	4.72	995	5.14	1038	5.54	1080	5.96	1121	6.38	1160	6.82
9600	811	4.04	859	4.44	905	4.84	950	5.26	993	5.68	1035	6.12	1076	6.56	1116	7.00	1154	7.45	-	-	

NOTE:

- Blower performance includes wet evaporator coil and 2" filters.
- At higher evaporator airflows and wet bulb conditions, condensate carry-over may occur. Decrease airflow downward as necessary.

Low Static Drive (Field-Supplied)
Standard Factory Drive
High-Static Drive

CONDENSER FAN PERFORMANCE

MODEL #	OUTDOOR CFM	AVAILABLE EXTERNAL STATIC PRESSURE - Inches W.C.													
		0.0		0.2		0.4		0.6		0.8		1.0		1.2	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSV060B	3100	513	0.50	615	0.65	706	0.80	790	0.98	867	1.15	938	1.33	1006	1.50
DSV096B	4400	478	0.60	560	0.78	634	0.96	702	1.14	765	1.34	824	1.54	880	1.74
DSV120B	5500	614	1.22	680	1.44	741	1.66	799	1.90	854	2.14	906	2.38	956	2.62
DSV144B	6000	535	1.02	609	1.28	679	1.56	744	1.84	805	2.14	862	2.44	921	2.82
DSV180B	7200	642	1.78	706	2.08	766	2.40	823	2.74	877	3.08	929	3.42	979	3.78
DSV240B	10800	775	3.87	827	4.29	877	4.71	925	5.16	971	5.61	1016	6.06	1052	7.00

Standard Factory Drive
High-Static Drive

DSV ELECTRICAL DATA

ELECTRICAL DATA - STANDARD EVAPORATOR MOTOR

MODEL #	VOLTAGE	COMPRESSOR			EVAP FAN		COND FAN		MCA	MAX FUSE / CKT. BKR. AMP	
		QTY	RLA	LRA	HP	FLA	HP	FLA			
DSV060B2	208-230/3/60	1	@	16.0	110.0	1.00	3.1	1.50	4.5	27.60	40
DSV060B4	460/3/60	1	@	7.8	52.0	1.00	1.5	1.50	2.2	13.45	20
DSV060B5	575/3/60	1	@	5.7	38.9	1.00	1.2	1.50	1.8	10.13	15
DSV096B2	208-230/3/60	2	@	15.3	83.0	1.00	3.1	2.00	5.8	43.33	50
DSV096B4	460/3/60	2	@	6.2	41.0	1.00	1.5	2.00	2.9	18.35	20
DSV096B5	575/3/60	2	@	4.8	33.0	1.00	1.2	2.00	2.3	14.30	15
DSV120B2	208-230/3/60	2	@	16.0	110.0	1.50	4.5	3.00	8.5	49.00	60
DSV120B4	460/3/60	2	@	7.8	52.0	1.50	2.2	3.00	4.2	23.95	30
DSV120B5	575/3/60	2	@	5.7	38.9	1.50	1.8	3.00	3.4	18.03	20
DSV144B2	208-230/3/60	2	@	19.0	123.0	2.00	5.8	3.00	8.5	57.05	70
DSV144B4	460/3/60	2	@	9.7	62.0	2.00	2.9	3.00	4.2	28.93	35
DSV144B5	575/3/60	2	@	7.4	50.0	2.00	2.3	3.00	3.4	22.35	25
DSV180B2	208-230/3/60	2	@	23.2	164.0	3.00	8.5	5.00	14.0	74.70	90
DSV180B4	460/3/60	2	@	11.2	75.0	3.00	4.2	5.00	6.6	36.00	45
DSV180B5	575/3/60	2	@	7.9	54.0	3.00	3.4	5.00	5.3	26.48	30
DSV240B2	208-230/3/60	2	@	30.1	225.0	5.00	14.0	7.50	20.4	102.13	125
DSV240B4	460/3/60	2	@	16.7	114.0	5.00	6.6	7.50	9.7	53.88	70
DSV240B5	575/3/60	2	@	12.2	80.0	5.00	5.3	7.50	7.8	40.55	50

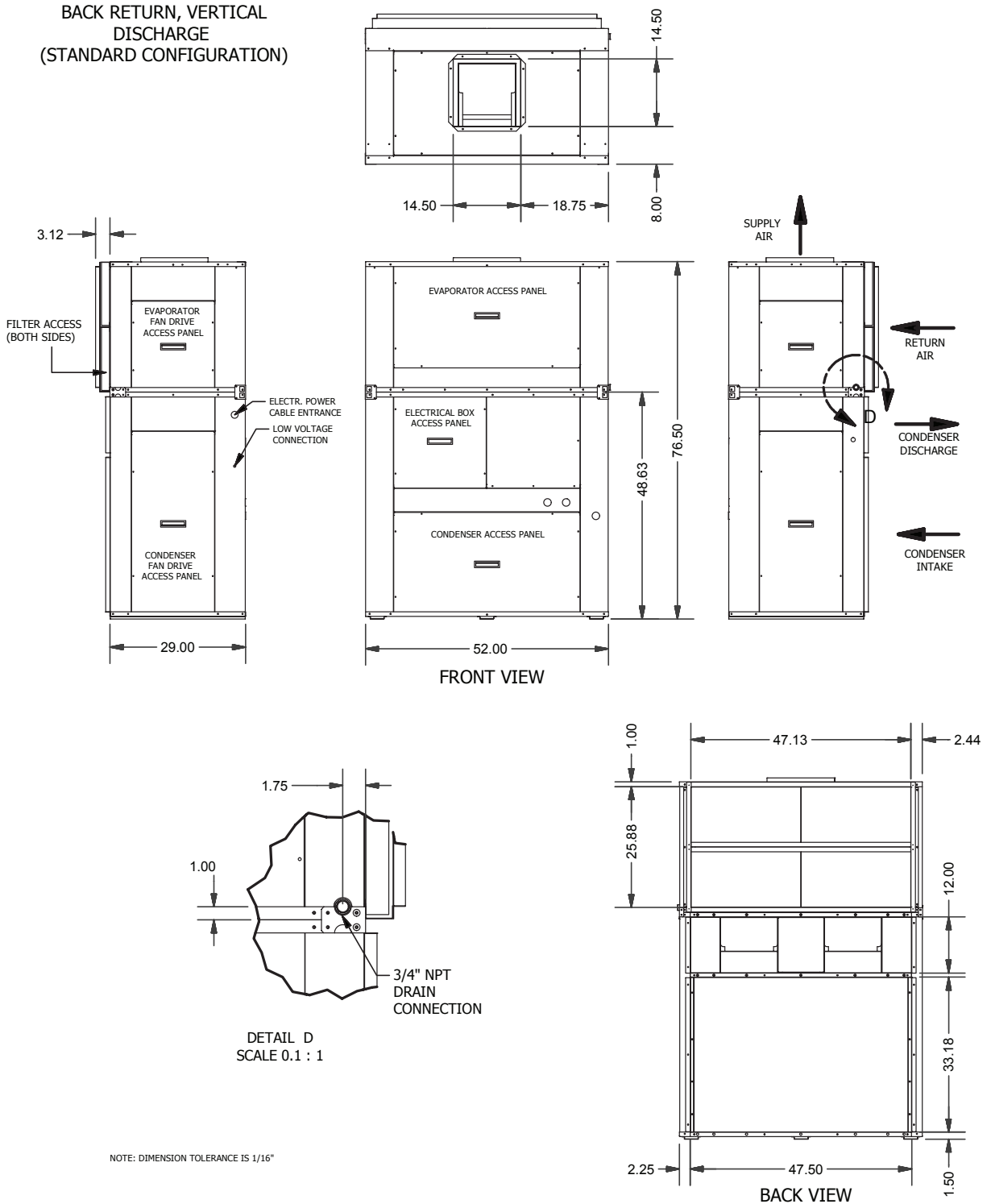
ELECTRICAL DATA - OVERSIZED EVAPORATOR MOTOR

MODEL #	VOLTAGE	COMPRESSOR			EVAP FAN		COND FAN		MCA	MAX FUSE / CKT. BKR. AMP	
		QTY	RLA	LRA	HP	FLA	HP	FLA			
DSV060B2	208-230/3/60	1	@	16.0	110.0	1.50	4.5	1.50	4.5	29.00	45
DSV060B4	460/3/60	1	@	7.8	52.0	1.50	2.2	1.50	2.2	14.15	20
DSV060B5	575/3/60	1	@	5.7	38.9	1.50	1.8	1.50	1.8	10.73	15
DSV096B2	208-230/3/60	2	@	15.3	83.0	1.50	4.5	2.00	5.8	44.73	60
DSV096B4	460/3/60	2	@	6.2	41.0	1.50	2.2	2.00	2.9	19.05	25
DSV096B5	575/3/60	2	@	4.8	33.0	1.50	1.8	2.00	2.3	14.90	15
DSV120B2	208-230/3/60	2	@	16.0	110.0	2.00	5.8	3.00	8.5	50.30	60
DSV120B4	460/3/60	2	@	7.8	52.0	2.00	2.9	3.00	4.2	24.65	30
DSV120B5	575/3/60	2	@	5.7	38.9	2.00	2.3	3.00	3.4	18.53	20
DSV144B2	208-230/3/60	2	@	19.0	123.0	3.00	8.5	3.00	8.5	59.75	70
DSV144B4	460/3/60	2	@	9.7	62.0	3.00	4.2	3.00	4.2	30.23	35
DSV144B5	575/3/60	2	@	7.4	50.0	3.00	3.4	3.00	3.4	23.45	30
DSV180B2	208-230/3/60	2	@	23.2	164.0	5.00	14.0	5.00	14.0	80.20	100
DSV180B4	460/3/60	2	@	11.2	75.0	5.00	6.6	5.00	6.6	38.40	45
DSV180B5	575/3/60	2	@	7.9	54.0	5.00	5.3	5.00	5.3	28.38	35
DSV240B2	208-230/3/60	2	@	30.1	225.0	7.50	20.4	7.50	20.4	108.53	125
DSV240B4	460/3/60	2	@	16.7	114.0	7.50	9.7	7.50	9.7	56.98	70
DSV240B5	575/3/60	2	@	12.2	80.0	7.50	7.8	7.50	7.8	43.05	50

DSV DIMENSIONAL DATA STANDARD CONFIGURATION

DSV060 VERTICAL AIR-COOLED UNIT

5 TON VERTICAL A/C UNIT DIMENSIONAL DATA

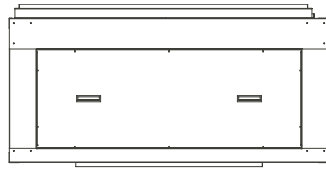


Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

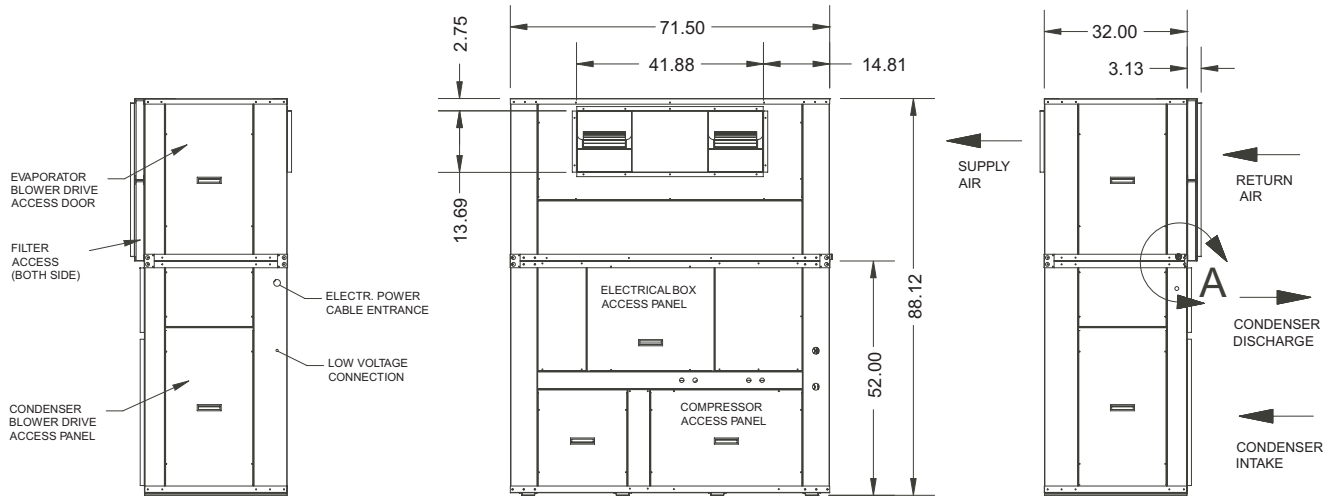
DSV DIMENSIONAL DATA STANDARD CONFIGURATION

DSV096/120 VERTICAL AIR-COOLED UNIT

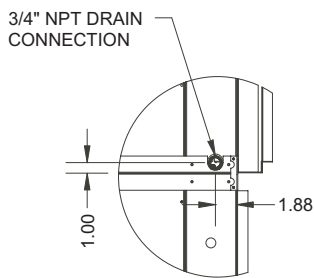
8/10 TON VERTICAL A/C UNITS
DIMENSIONAL DATA



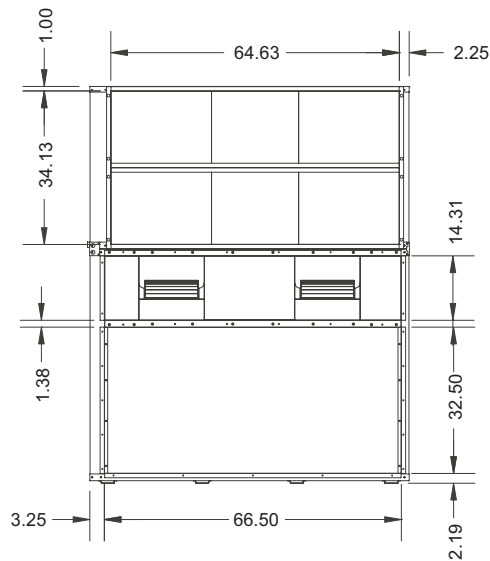
REAR RETURN,
FRONT DISCHARGE
(STANDARD CONFIGURATION)



FRONT VIEW



DETAIL A



BACK VIEW

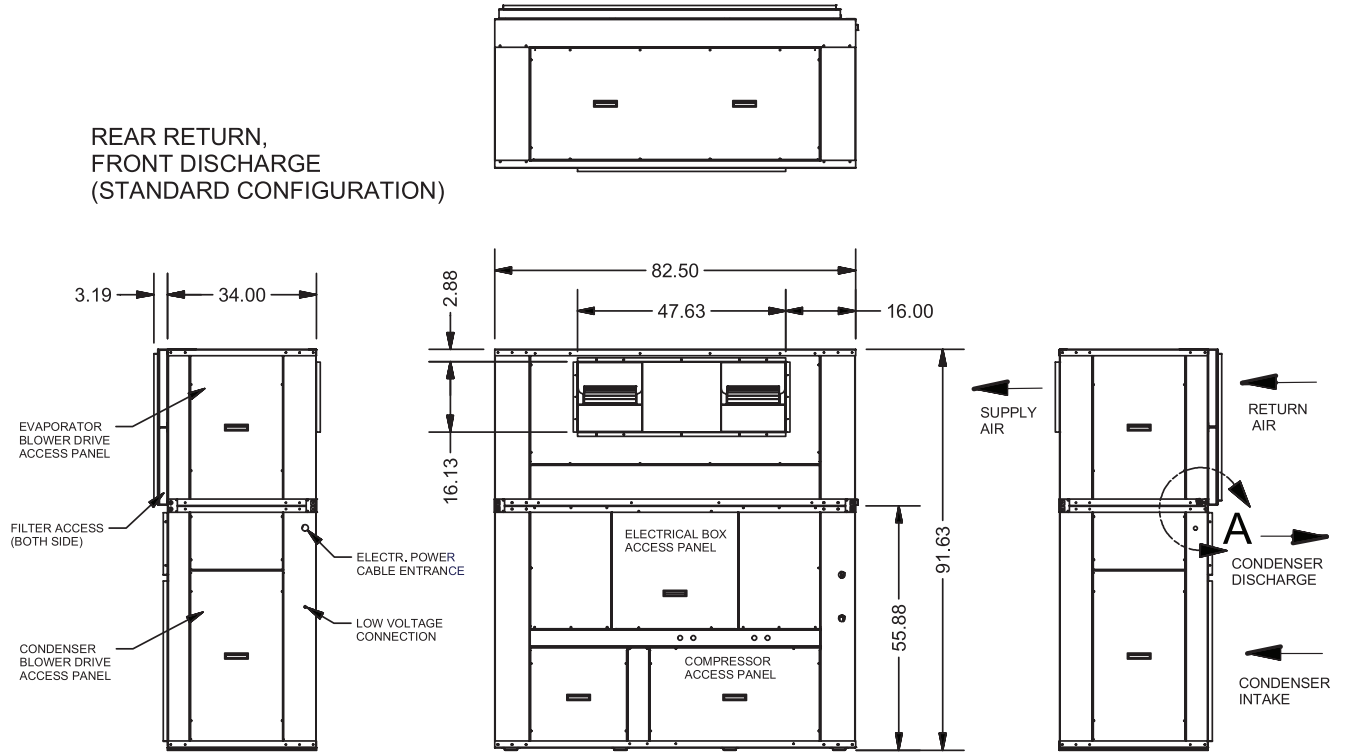
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DSV DIMENSIONAL DATA STANDARD CONFIGURATION

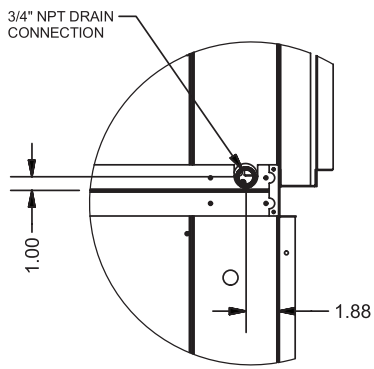
DSV144/180 VERTICAL AIR-COOLED UNIT

12/15 TON VERTICAL A/C UNITS
DIMENSIONAL DATA

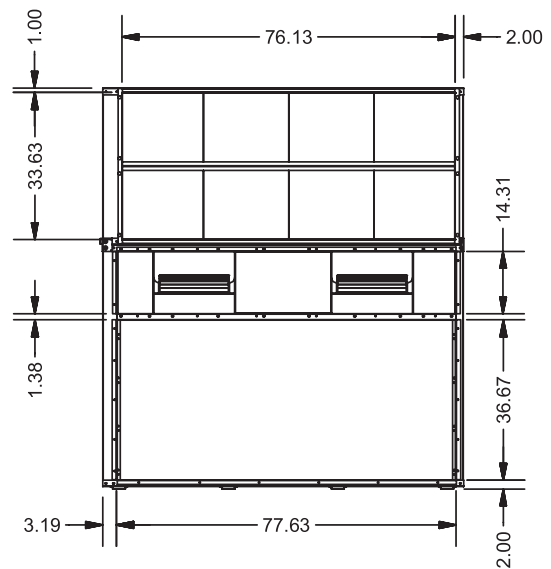
REAR RETURN,
FRONT DISCHARGE
(STANDARD CONFIGURATION)



FRONT VIEW



DETAIL A



BACK VIEW

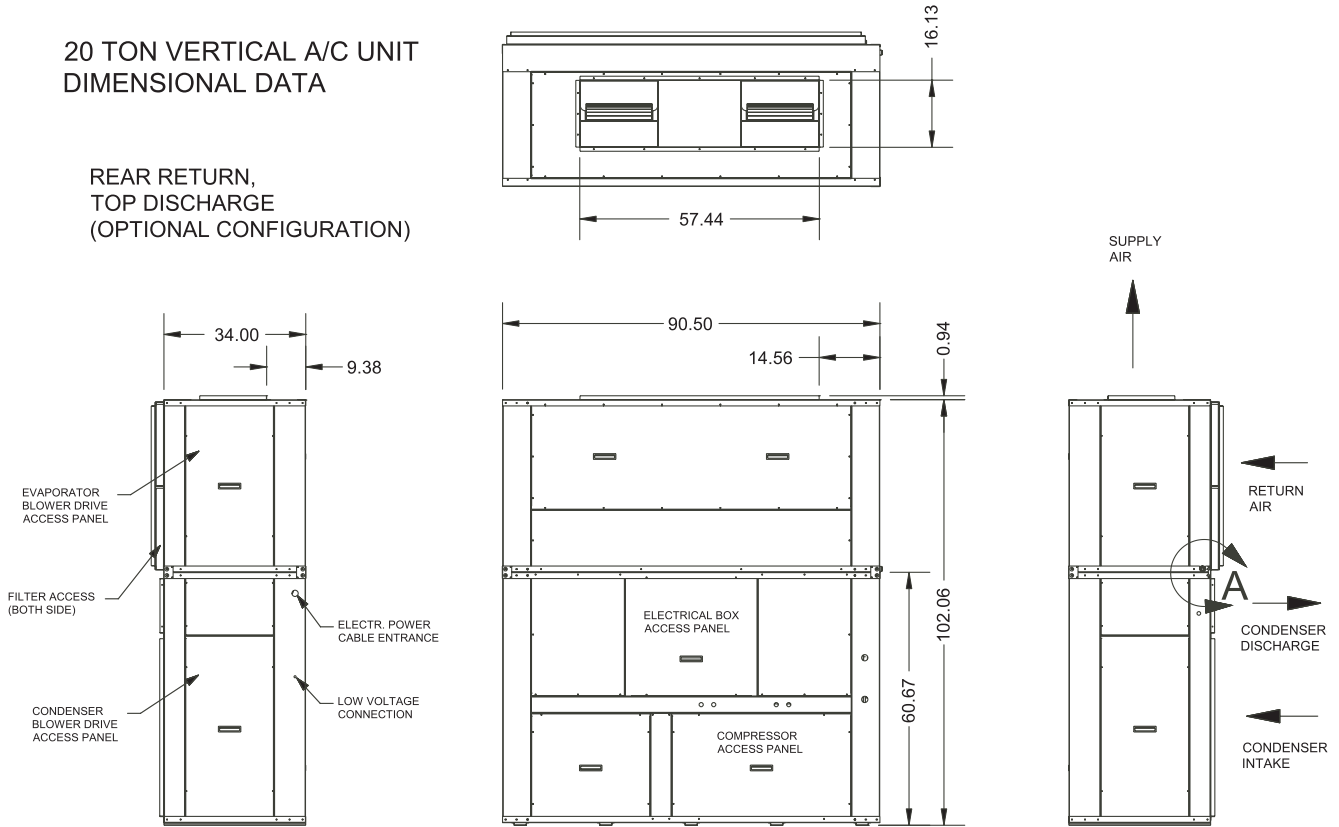
Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

DSV DIMENSIONAL DATA OPTIONAL CONFIGURATION

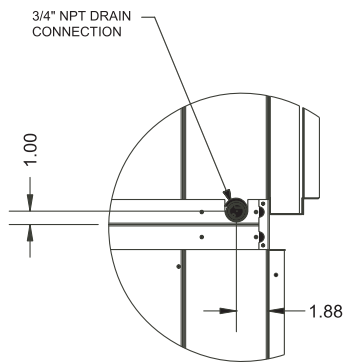
DSV240 VERTICAL AIR-COOLED UNIT

20 TON VERTICAL A/C UNIT
DIMENSIONAL DATA

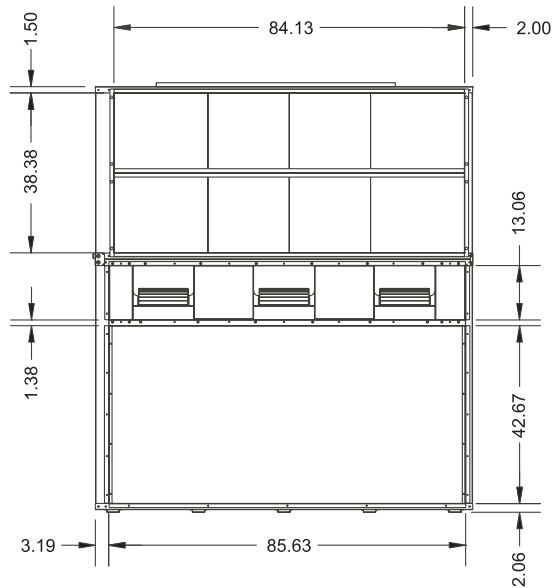
REAR RETURN,
TOP DISCHARGE
(OPTIONAL CONFIGURATION)



FRONT VIEW



DETAIL A



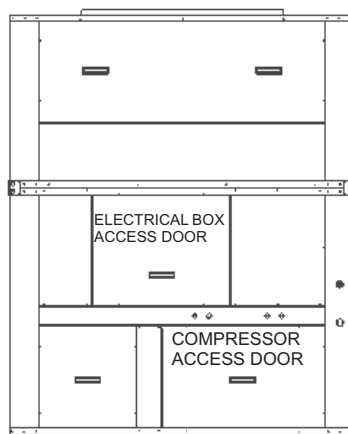
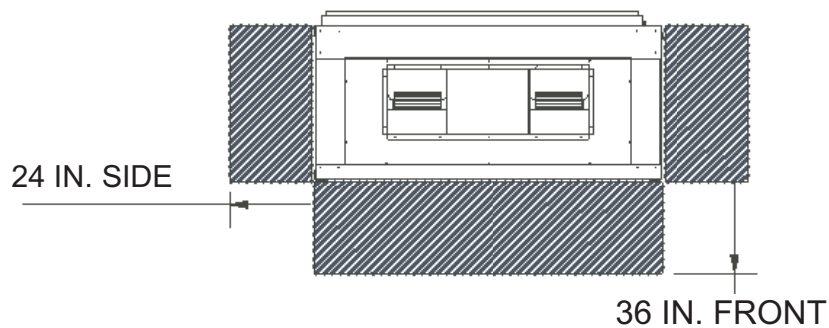
BACK VIEW

Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

TYPICAL SERVICE CLEARANCES

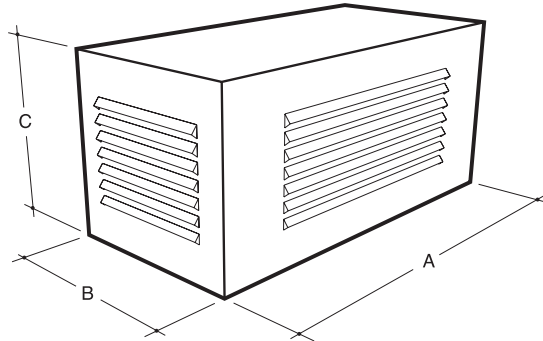
VERTICAL A/C UNIT SERVICE CLEARANCES

TOP VIEW



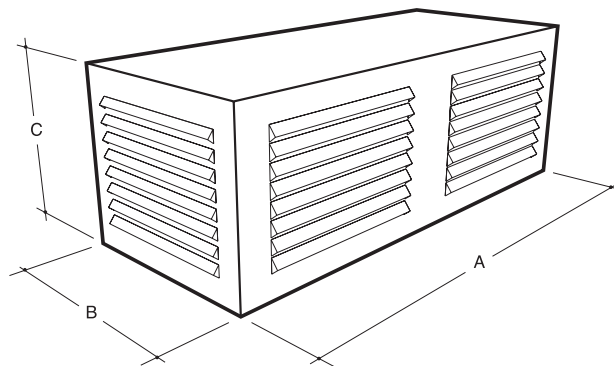
FRONT VIEW

DSV DISCHARGE PLENUM



PLENUM DIMENSIONS (INCHES)

UNIT SIZE	DIMENSIONS			Side Grill	Front Grill
	A	B	C		
5 Ton	52	29	24	16x12 (2x)	32x12
8 Ton	71.5	32	24	20x18 (2x)	48x18
10 Ton	71.5	32	24	20x18 (2x)	48x18



PLENUM DIMENSIONS (INCHES)

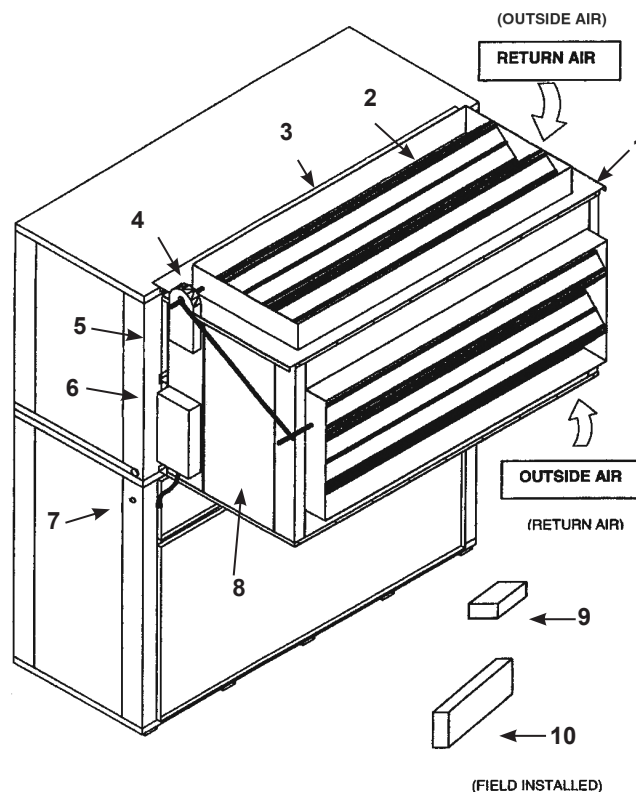
UNIT SIZE	DIMENSIONS			Side Grill	Front Grill
	A	B	C		
12 Ton	82.5	34	28	24x20 (2x)	28x20 (2x)
15 Ton	82.5	34	28	24x20 (2x)	28x20 (2x)
20 Ton	90.5	34	28	24x20 (2x)	32x20 (2x)

DSV AIRSIDE ECONOMIZER

Airside economizers are designed to meet current building and legislated codes for indoor ventilation. In addition to improving indoor air quality, economizers provide substantial energy savings by utilizing cool outside air instead of mechanical cooling whenever outside conditions permit.

The outlet or discharge of the airside economizer is fitted to the return air inlet of the packaged air conditioning unit. The two inlets to the economizer are fitted to the return air and outside air ductwork. opposed blade dampers located in each inlet modulate the incoming air streams as they enter the mixing box. The outside air damper can be maintained at a predetermined position. In this way the buildings ventilation requirements can be met at all times.

VERTICAL DSV ECONOMIZER



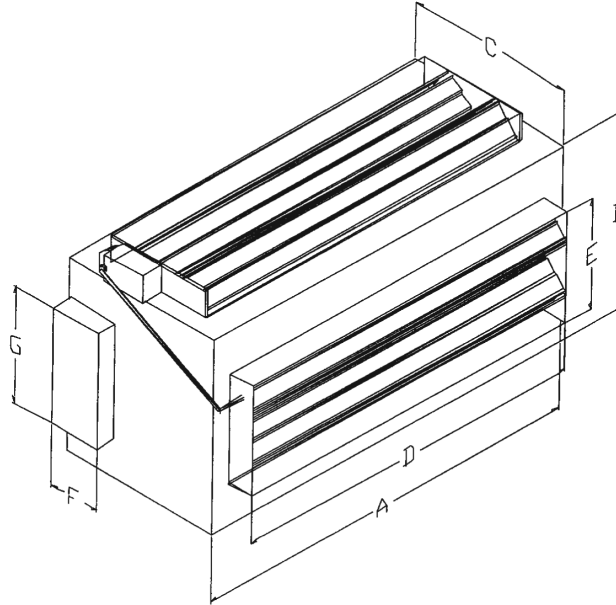
ALL ECONOMIZERS ARE SHIPPED COMPLETE WITH:

1. 18-gauge galvanized cabinet, fully insulated.
2. Opposed blade, low leakage damper sections.
3. Steel securing strip for unit support*.
4. SKYMARK M9200 Series return damper actuator.
5. Filters and access.
6. Honeywell W7215 logic module with protective cabinet.
7. One step jack/plug wiring assembly.
8. Access doors on both sides of cabinet.
9. Enthalpy sensor.
10. Discharge sensor.
11. Return air / outside configuration is field convertible

NOTE: Additional field support required.

DSV AIRSIDE ECONOMIZER

VERTICAL DSV ECONOMIZER



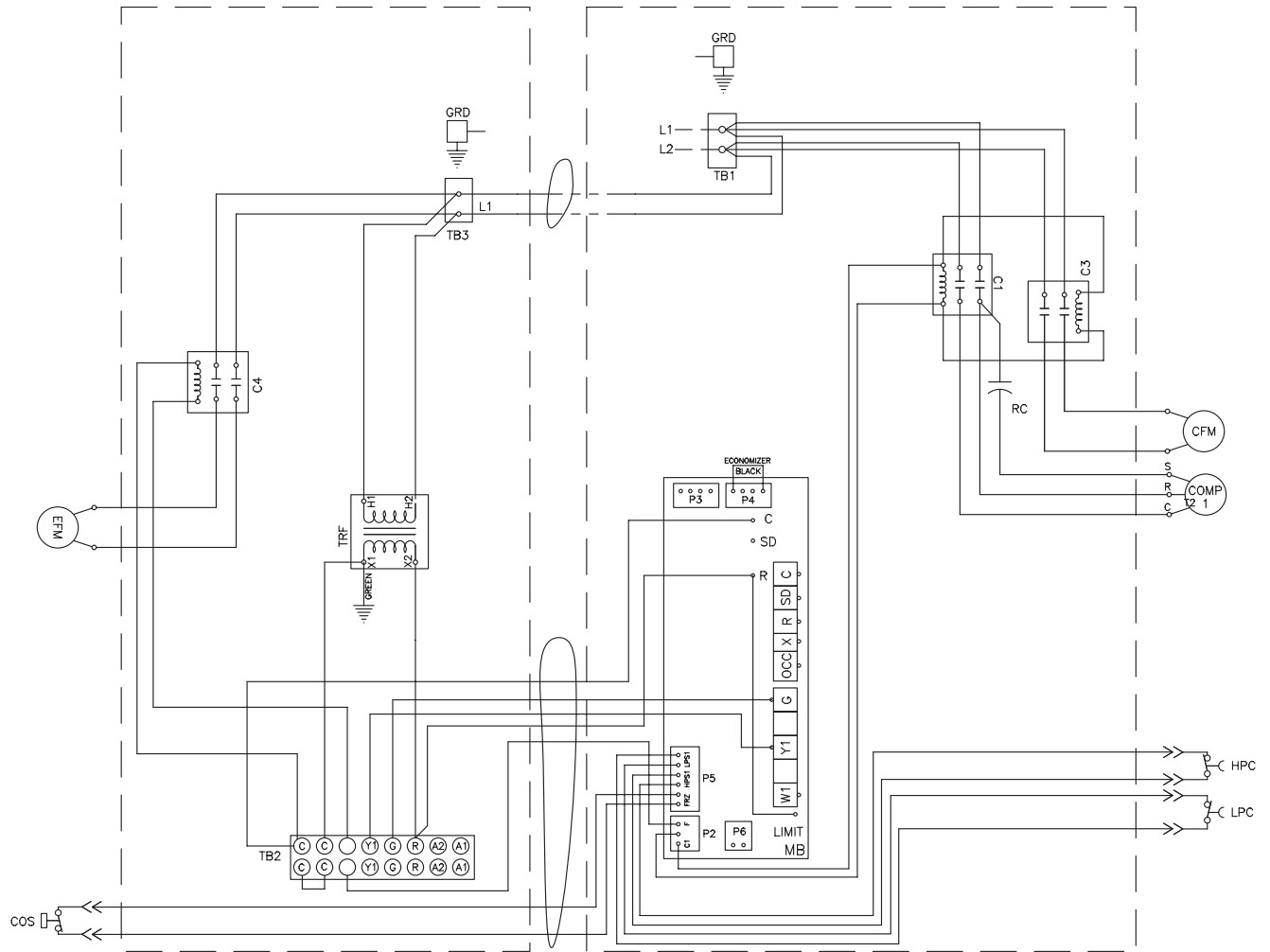
VERTICAL UNIT MODEL NUMBER	ECONOMIZER MODEL NUMBER	MIXING BOX DIM'N			DAMPER DIM'N	
		A	B	C	D	E
DSV060B	VASE-060B-1	49.00	27.75	24.00	40.00	14.00
DSV096B/120B	VASE-120B-1	66.50	36.25	26.50	58.00	19.50
DSV144B/180B	VASE-180B-1	78.00	35.75	28.50	70.00	19.50
DSV240B	VASE-240B-1	86.00	41.25	34.00	78.00	25.00

CONTROL MODULE	
F	G
8.00	15.00
8.00	15.00
8.00	15.00
8.00	15.00

WIRING DIAGRAM

2-4 TON HORIZONTAL SINGLE PHASE AC WIRING SCHEMATIC

DSH024B - 048B - 208-230/1PH/60HZ



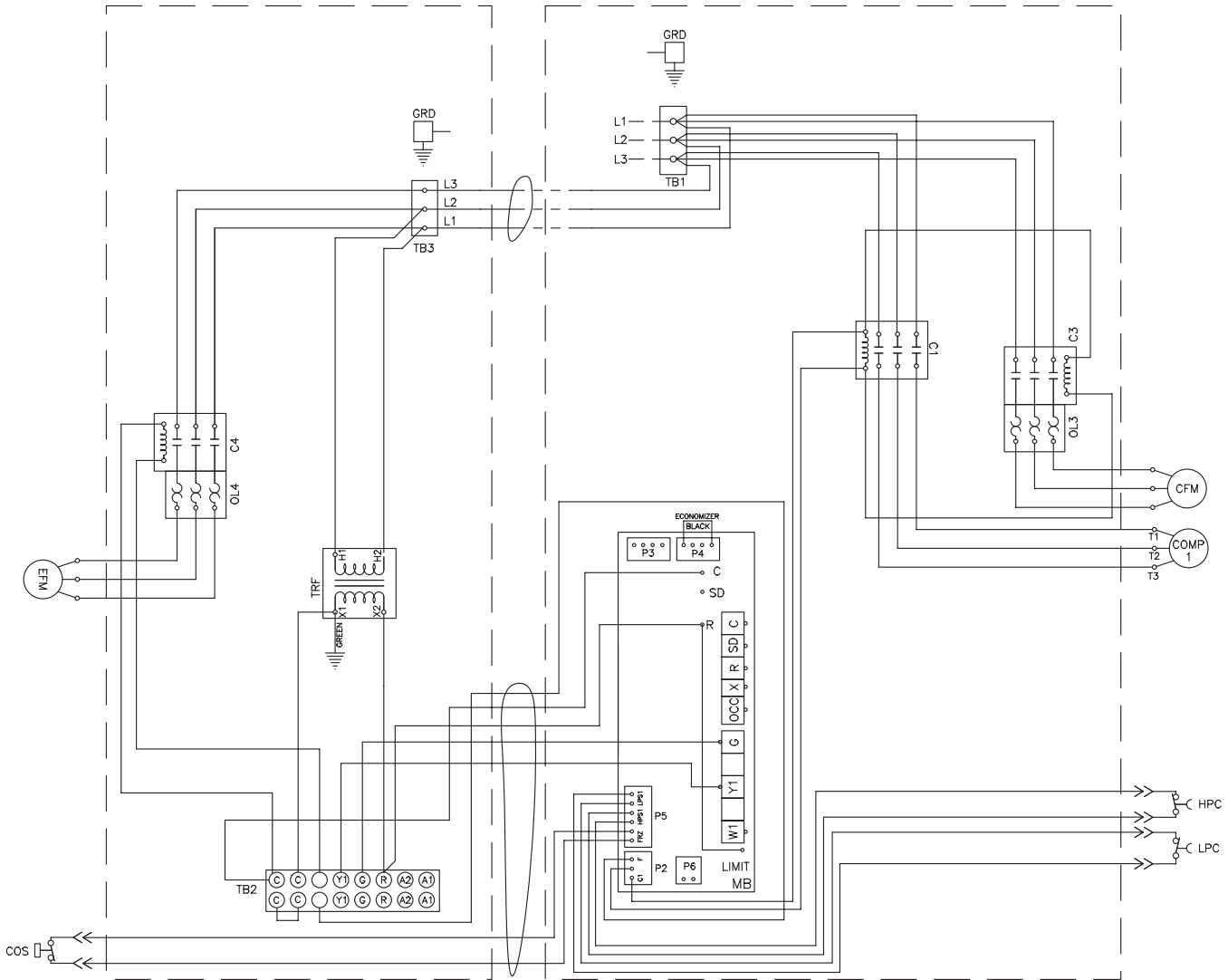
- TB1 – LINE VOLTAGE TERMINAL BLOCK
- TB2 – LOW VOLTAGE TERMINAL BLOCK
- TB3 – EVAP. LINE VOLTAGE TERMINAL BLOCK
- CFM – CONDENSER FAN MOTOR
- EFM – EVAPORATOR FAN MOTOR
- COMP 1 – COMPRESSOR ONE
- TRF – TRANSFORMER
- GRD – GROUND

- MB – MICROPROCESSOR BOARD
- C1 – COMPRESSOR ONE CONTACTOR
- C3 – COND. FAN MOTOR CONTACTOR
- C4 – EVAP. FAN MOTOR CONTACTOR
- RC – RUN CAPACITOR
- HPC1 – HIGH PRESSURE SWITCH (COMP 1)
- LPC1 – LOW PRESSURE SWITCH (COMP 1)
- COS – CONDENSATE OVERFLOW SWITCH

WIRING DIAGRAM

2-5 TON HORIZONTAL 3 PHASE AC WIRING SCHEMATIC

DSH024B - 060B - 208-230, 460, 575V/3PH, 60HZ

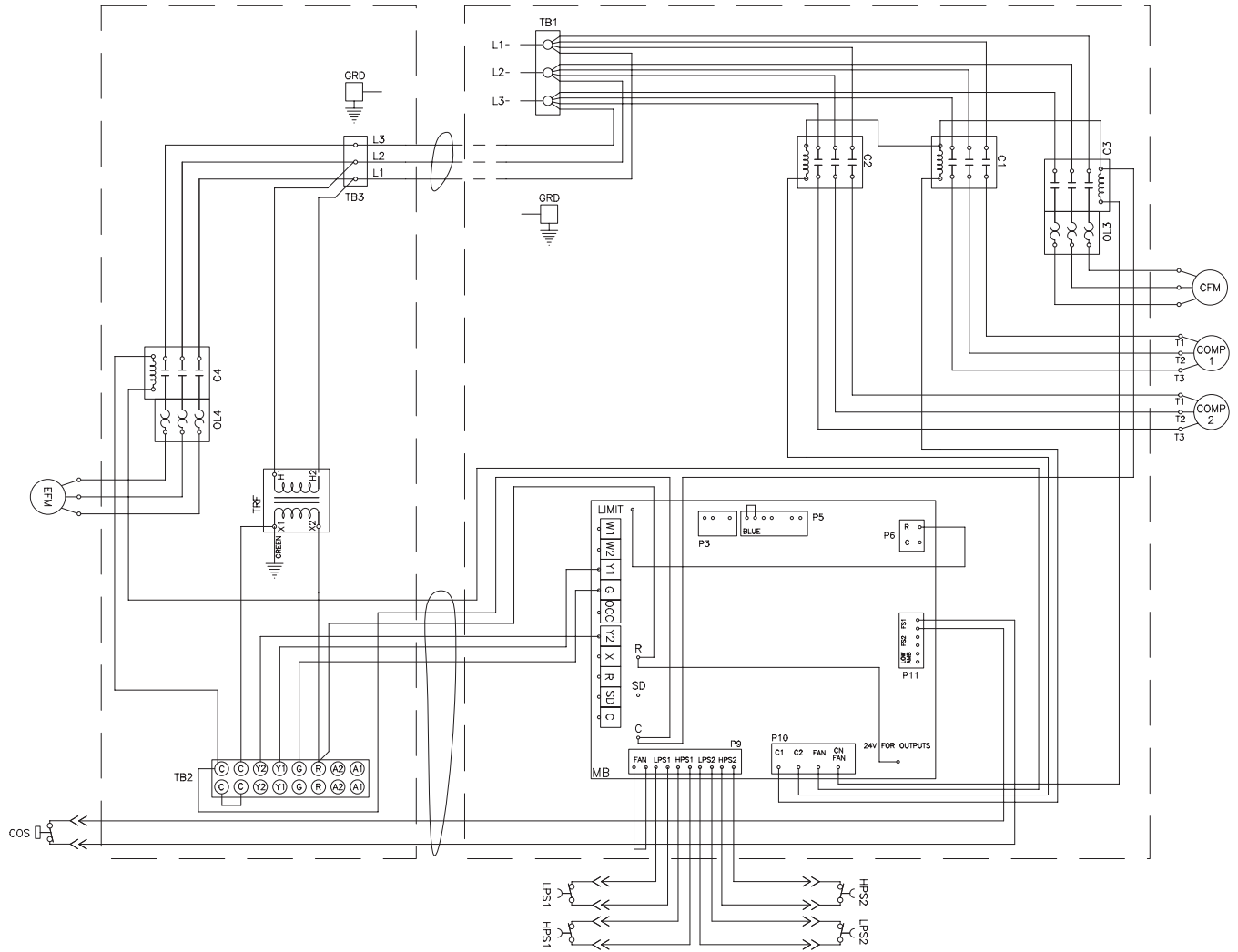


- TB1 - LINE VOLTAGE TERMINAL BLOCK
- TB2 - LOW VOLTAGE TERMINAL BLOCK
- TB3 - EVAP. LINE VOLTAGE TERMINAL BLOCK
- CFM - CONDENSER FAN MOTOR
- EFM - EVAPORATOR FAN MOTOR
- COMP 1 - COMPRESSOR ONE
- TRF - TRANSFORMER
- GRD - GROUND

- MB - MICROPROCESSOR BOARD
- C1 - COMPRESSOR ONE CONTACTOR
- C3 - COND. FAN MOTOR CONTACTOR
- C4 - EVAP. FAN MOTOR CONTACTOR
- OL3 - COND. FAN MOTOR OVERLOAD
- OL4 - EVAP. FAN MOTOR OVERLOAD
- HPC1 - HIGH PRESSURE SWITCH (COMP 1)
- LPC1 - LOW PRESSURE SWITCH (COMP 1)
- COS - CONDENSATE OVERFLOW SWITCH

8 TON HORIZONTAL 3 PHASE AC WIRING SCHEMATIC

DSH096B - 208-230, 460, 575V/3PH/60HZ



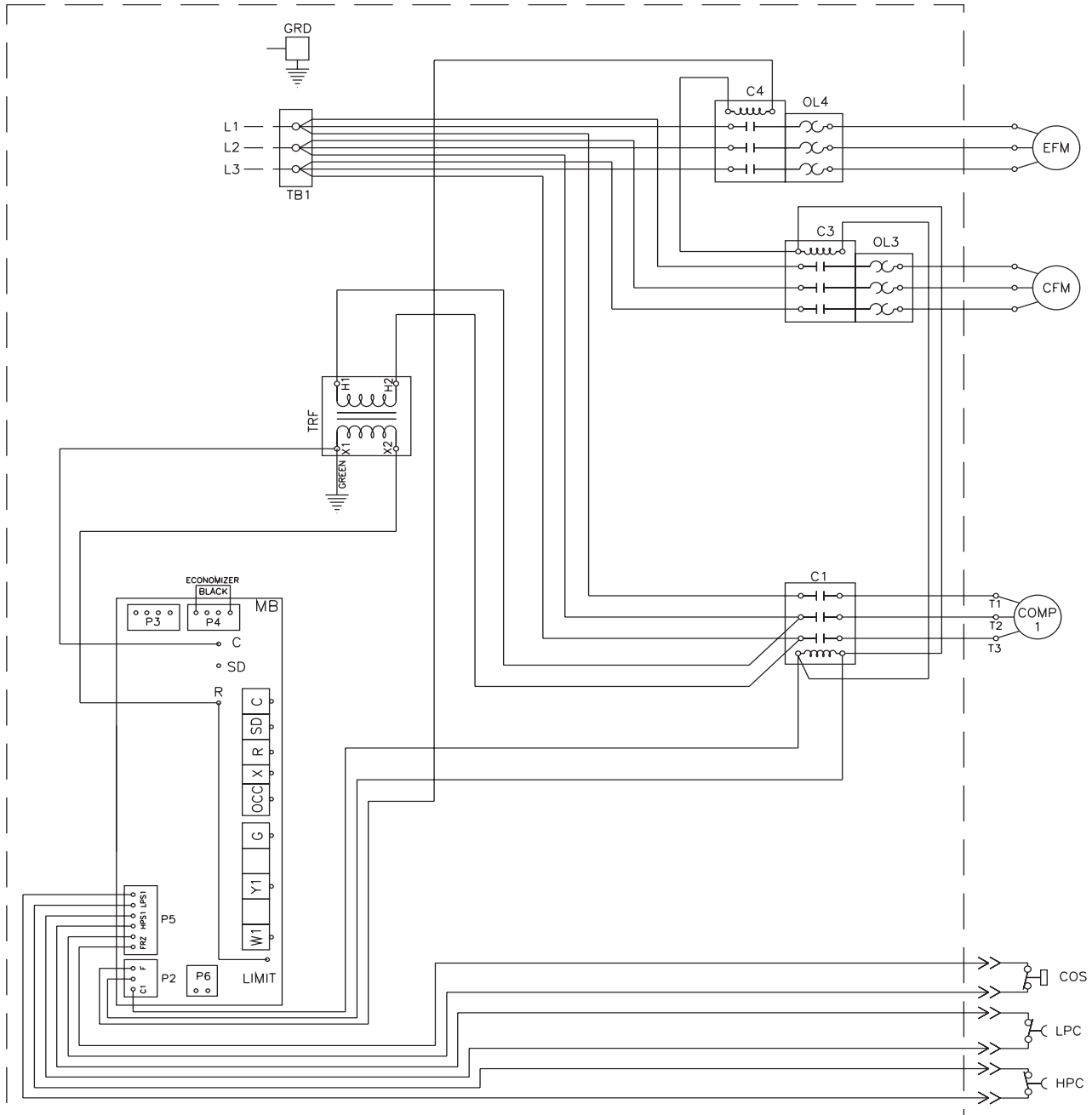
TB1 - LINE VOLTAGE TERMINAL BLOCK
 TB2 - LOW VOLTAGE TERMINAL BLOCK
 TB3 - EVAP. LINE VOLTAGE TERMINAL BLOCK
 CFM - CONDENSER FAN MOTOR
 EFM - EVAPORATOR FAN MOTOR
 COMP 1 - COMPRESSOR ONE
 COMP 2 - COMPRESSOR TWO
 GRD - GROUND
 TRF - TRANSFORMER

COS - CONDENSATE OVERFLOW SWITCH
 MB - MICROPROCESSOR BOARD
 C1 - COMPRESSOR ONE CONTACTOR
 C2 - COMPRESSOR TWO CONTACTOR
 C3 - COND. FAN MOTOR CONTACTOR
 C4 - EVAP. FAN MOTOR CONTACTOR
 OL3 - COND. FAN MOTOR OVERLOAD
 OL4 - EVAP. FAN MOTOR OVERLOAD
 HPC1 - HIGH PRESSURE SWITCH (COMP 1)
 LPC1 - LOW PRESSURE SWITCH (COMP 1)
 HPC2 - HIGH PRESSURE SWITCH (COMP 2)
 LPC2 - LOW PRESSURE SWITCH (COMP 2)

WIRING DIAGRAM

5 TON VERTICAL 3 PHASE AC WIRING SCHEMATIC

DSV060B - 208-230, 460, 575V/3PH/60HZ

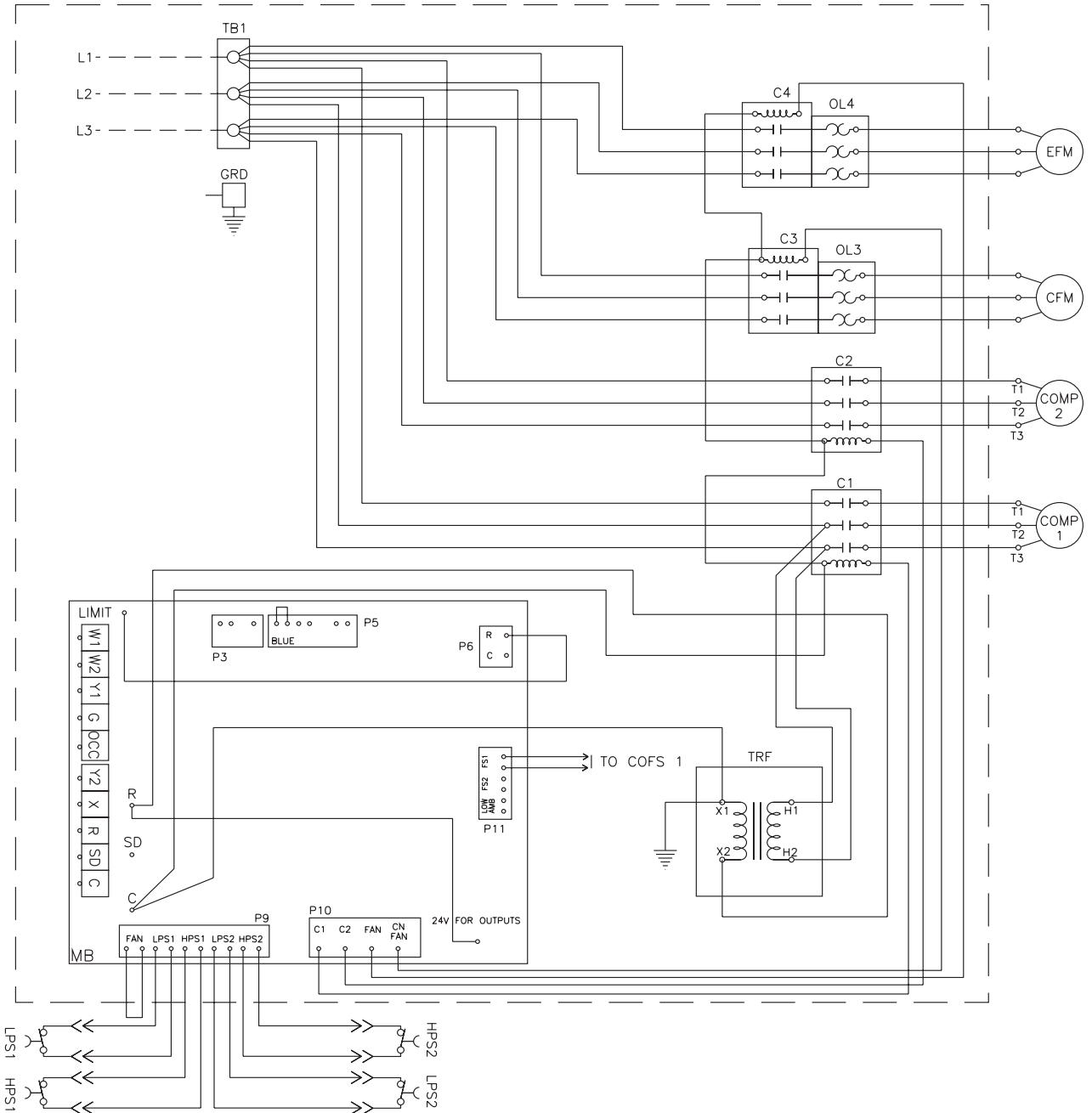


- TB1 - LINE VOLTAGE TERMINAL BLOCK
- CFM - CONDENSER FAN MOTOR
- EFM - EVAPORATOR FAN MOTOR
- COMP 1 - COMPRESSOR ONE
- TRF - TRANSFORMER
- GRD - GROUND
- HPC1 - HIGH PRESSURE SWITCH (COMP 1)
- LPC1 - LOW PRESSURE SWITCH (COMP 1)

- MB - MICROPROCESSOR BOARD
- C1 - COMPRESSOR ONE CONTACTOR
- C3 - COND. FAN MOTOR CONTACTOR
- C4 - EVAP. FAN MOTOR CONTACTOR
- OL3 - COND. FAN MOTOR OVERLOAD
- OL4 - EVAP. FAN MOTOR OVERLOAD
- COS - CONDENSATE OVERFLOW SWITCH

8-15 TON VERTICAL 3 PHASE AC WIRING SCHEMATIC

DSV096B - 144B - 208-230, 460, 575V/3PH/60HZ
 DSV180B - 460, 575V/3PH/60HZ



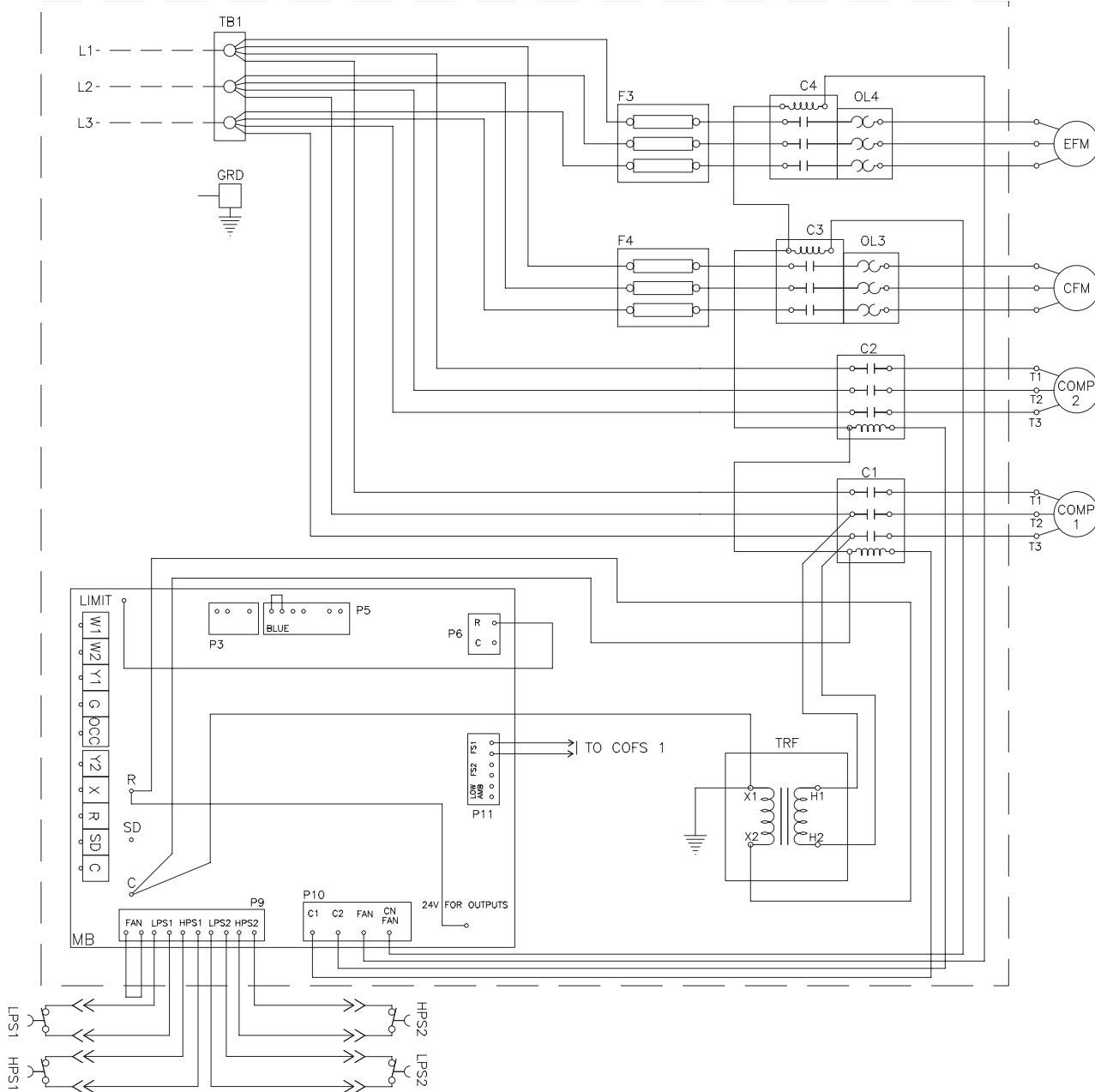
TB1 - LINE VOLTAGE TERMINAL BLOCK
 CFM - CONDENSER FAN MOTOR
 EFM - EVAPORATOR FAN MOTOR
 COMP 1 - COMPRESSOR ONE
 COMP 2 - COMPRESSOR TWO
 COS - CONDENSATE OVERFLOW SWITCH
 TRF - TRANSFORMER
 GRD - GROUND
 MB - MICROPROCESSOR BOARD

C2 - COMPRESSOR TWO CONTACTOR
 C1 - COMPRESSOR ONE CONTACTOR
 C3 - COND. FAN MOTOR CONTACTOR
 C4 - EVAP. FAN MOTOR CONTACTOR
 OL3 - COND. FAN MOTOR OVERLOAD
 OL4 - EVAP. FAN MOTOR OVERLOAD
 HPC1 - HIGH PRESSURE SWITCH (COMP 1)
 LPC1 - LOW PRESSURE SWITCH (COMP 1)
 HPC2 - HIGH PRESSURE SWITCH (COMP 2)
 LPC2 - LOW PRESSURE SWITCH (COMP 2)

WIRING DIAGRAM

15 TON VERTICAL 3 PHASE AC WIRING SCHEMATIC

DSV180B - 208-230V/3PH/60HZ

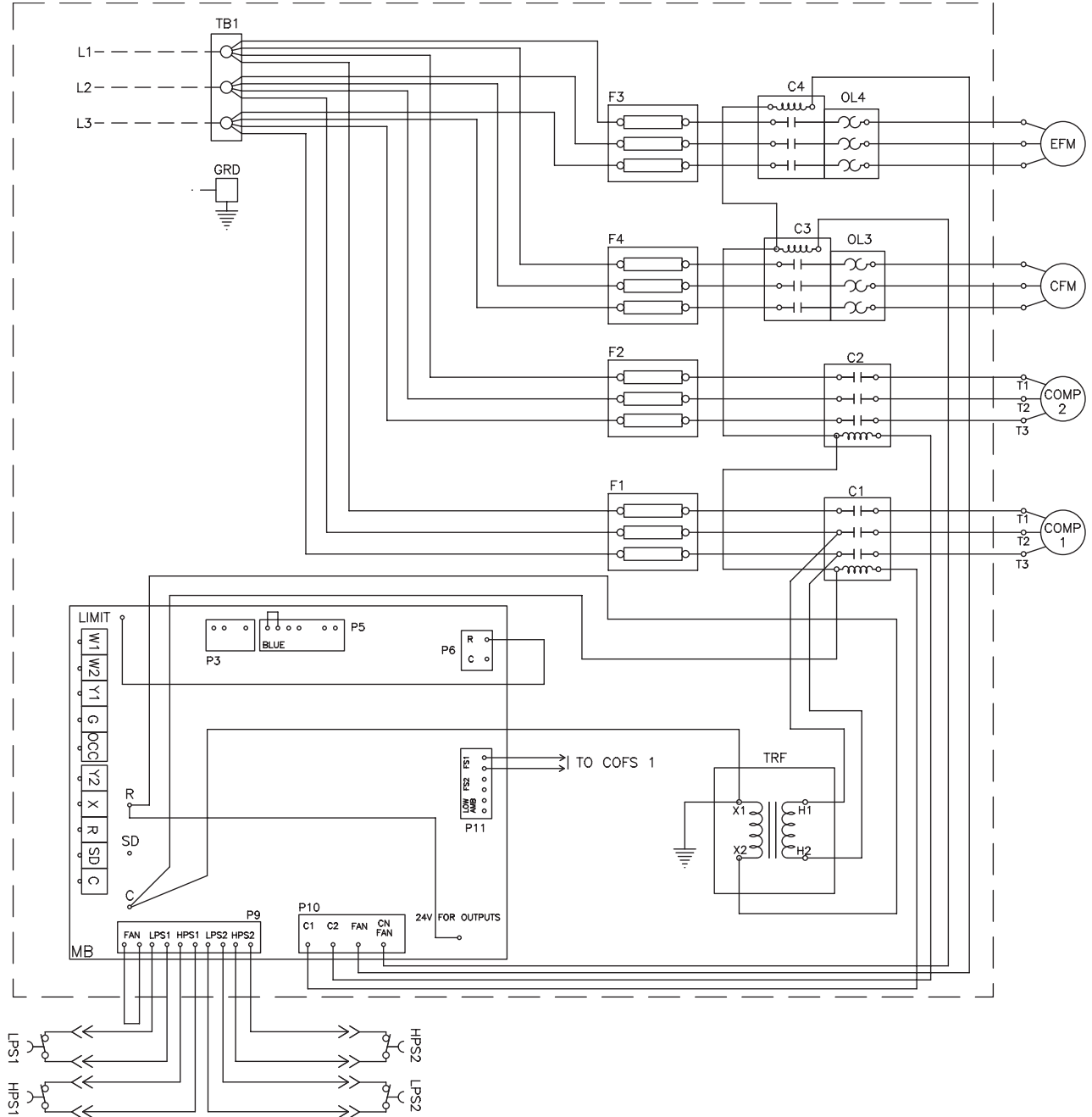


- TB1 - LINE VOLTAGE TERMINAL BLOCK
- CFM - CONDENSER FAN MOTOR
- EFM - EVAPORATOR FAN MOTOR
- COMP 1 - COMPRESSOR ONE
- COMP 2 - COMPRESSOR TWO
- COS - CONDENSATE OVERFLOW SWITCH
- TRF - TRANSFORMER
- GRD - GROUND
- F3 - EVAP. FAN FUSES
- F4 - COND. FAN FUSES

- MB - MICROPROCESSOR BOARD
- C2 - COMPRESSOR TWO CONTACTOR
- C1 - COMPRESSOR ONE CONTACTOR
- C3 - COND. FAN MOTOR CONTACTOR
- C4 - EVAP. FAN MOTOR CONTACTOR
- OL3 - COND. FAN MOTOR OVERLOAD
- OL4 - EVAP. FAN MOTOR OVERLOAD
- HPC1 - HIGH PRESSURE SWITCH (COMP 1)
- LPC1 - LOW PRESSURE SWITCH (COMP 1)
- HPC2 - HIGH PRESSURE SWITCH (COMP 2)
- LPC2 - LOW PRESSURE SWITCH (COMP 2)

20 TON VERTICAL 3 PHASE AC WIRING SCHEMATIC

DSV240B - 208-230, 460, 575V/3PH/60HZ



- TB1 - LINE VOLTAGE TERMINAL BLOCK
- CFM - CONDENSER FAN MOTOR
- EFM - EVAPORATOR FAN MOTOR
- COMP 1 - COMPRESSOR ONE
- COMP 2 - COMPRESSOR TWO
- COS - CONDENSATE OVERFLOW SWITCH
- TRF - TRANSFORMER
- GRD - GROUND
- F1 - COMPRESSOR ONE FUSES
- F2 - COMPRESSOR TWO FUSES
- F3 - EVAP. FAN FUSES
- F4 - COND. FAN FUSES

- MB - MICROPROCESSOR BOARD
- C2 - COMPRESSOR TWO CONTACTOR
- C1 - COMPRESSOR ONE CONTACTOR
- C3 - COND. FAN MOTOR CONTACTOR
- C4 - EVAP. FAN MOTOR CONTACTOR
- OL3 - COND. FAN MOTOR OVERLOAD
- OL4 - EVAP. FAN MOTOR OVERLOAD
- HPC1 - HIGH PRESSURE SWITCH (COMP 1)
- LPC1 - LOW PRESSURE SWITCH (COMP 1)
- HPC2 - HIGH PRESSURE SWITCH (COMP 2)
- LPC2 - LOW PRESSURE SWITCH (COMP 2)

SPECIFICATIONS

GENERAL

HORIZONTAL MODELS

All horizontal models ship as a fully assembled, factory charged, packaged unit. All models are designed for suspended mounting via integral structural channels. These units include refrigerant line shut-off valves between the condenser and evaporator section, allowing the unit to be field split.

VERTICAL MODELS

The 5 ton model ships as a fully assembled, factory charged, packaged unit with vertical evaporator discharge as standard. All 8-20 ton models shall be shipped as a factory split unit with a nitrogen holding charge with horizontal evaporator fan discharge as standard. All models are designed for free standing mounting, or on a field-fabricated structural steel stand.

CABINET

All cabinets shall be completely constructed of heavy gauge corrosion-resistant steel. The entire unit interior (both evaporator and condensing section) shall be insulated with 1/2" thick, 2-lb. density insulation. Service panels shall be equipped with lifting handles for ease of removal and handling. Duct flanges for condenser discharge, condenser intake, and evaporator discharges shall be provided with the unit for field installation. Duct flange on evaporator return shall be incorporated into the filter frame.

COMPRESSORS

All models shall utilize high-efficiency "Scroll" type, R-410A, hermetic compressors. Compressors shall be mounted on rubber isolators to minimize vibration transmission. Internal motor overload protection shall be provided. External high pressure and low pressure cut-out switches are included in each compressor control circuit. All 8-20 ton models shall have two individual scroll compressors.

REFRIGERANT CIRCUITS

Models 5 tons and smaller have a single refrigeration circuit. Each refrigeration circuit is thoroughly evacuated, and fully charged with R-410A refrigerant before shipment. Vertical models 8-20 tons shall have two independent refrigeration circuits, and ship with a nitrogen holding charge only. The 8 ton horizontal model is fully charged with R-410A refrigerant before shipment. Each refrigeration circuit includes an adjustable thermal

expansion valve (with external equalizer), liquid line filter drier, sight glass/moisture indicator, a high refrigerant pressure safety switch, a low refrigerant pressure switch (for compressor protection), and service gauge ports.

EVAPORATOR AND CONDENSER COILS

The evaporator and condenser coils shall be constructed of internally enhanced copper tubes mechanically bonded to enhanced-surface aluminum fins. Both coils shall be employed in a draw-thru configuration. Large evaporator coil face area minimizes potential for water blow-off.

INDOOR/OUTDOOR FANS

Forward curved, double inlet and double width centrifugal blowers shall be used for both evaporator and condenser air movement. Blower wheels shall be fabricated of galvanized steel. Blowers employ solid steel shafts, supported in permanently lubricated ball bearings. All blowers shall be belt driven. Variable-pitch motor sheaves allow for field adjustment of blower rpm. Motor shall be 1750 RPM, open drip proof design.

FILTERS

All models shall be shipped with 2-inch thick medium-efficiency throwaway filters factory installed.

ELECTRICAL/CONTROLS

All units are completely factory wired with all necessary controls. Current overload protection is provided on both evaporator and condenser motors with external manual reset overload protection. The 24 volt control circuit includes an oversized transformer with an internal circuit breaker.

MICROPROCESSOR CONTROLS

The control system microprocessor board shall be specifically designed for air-cooled unit operation.

- a) Unit shall be complete with self-contained low-voltage control circuit.
- b) Unit shall incorporate a lockout circuit which provides reset capability at the space thermostat or base unit, should any of the following standard safety devices trip and shut off compressor.
 - Loss-of-charge/Low-pressure switch
 - High-pressure switch
 - Condensate Overflow protection switch

- c) Unit shall operate with conventional thermostat designs and have a low voltage terminal strip for easy hook-up.
- d) Unit control board shall have on-board diagnostics and fault code display.
- e) Standard controls shall include anti-short cycle and low voltage protection.
- f) Control board shall monitor each refrigerant safety switch independently.
- h) Control board shall retain last 5 fault codes in non volatile memory which will not be lost in the event of a power loss.

FACTORY INSTALLED OPTIONS

Oversized Evaporator Fan Motors

Increased horsepower motor and drive components for applications where external static pressure requirements exceed the capability of the standard motor.

Corrosion Resistant Coatings

Condenser coil shall receive a 1-mil thickness of a cathodic epoxy type electro-deposition coating, applied in a multiple dip and bake process.

Stainless Steel Drain Pan

Evaporator drain pan shall be fabricated of 304 stainless steel material. The 3/4" NPT drain connection fitting is also fabricated of 304 stainless steel.

Condensate Overflow Switch

Condensate overflow switch shall be mounted in the evaporator drain pan and in the event of an alarm, shutoff power to unit compressor.

Hot Gas Bypass

Adjustable hot gas regulator and all necessary piping shall be installed on lead compressor circuit. The modulating regulator diverts hot discharge gas to evaporator inlet. Bypass capacity shall be minimum 50% of compressor capacity. The Bypass valve opens at a preset suction pressure to prevent coil freeze-up at light evaporator load, or low airflow conditions.

FIELD INSTALLED OPTIONS

Low Ambient Damper Kit

Head pressure control damper kit will allow unit operation down to 0 F ambient. Damper assembly mounts on condenser air exhaust.

Oversized Evaporator Fan Motor Kit

Increased horsepower motors and drive components are available for field installation.

Airside Economizer

Consisting of an integrated mixing box and control assembly, the economizer mates easily to all D-Series air handlers. A factory supplied wiring harness and jack plug assembly simplifies field wiring, reducing valuable installation time. No additional controls or transformers are necessary to complete the installation.

The mixing box is manufactured from heavy gauge steel and completely insulated with one half inch of insulation. The mixing box is complete with fully modulating opposed blade dampers and linkage.

Low leakage dampers meet the criteria of less than 10 CFM per square foot at 4" w.g. (0.5% at 2000 fpm). All damper blades are provided with neoprene seals providing a tight seal and quiet operation.

Honeywell W7215 Economizer Control Module is a multi-functional controller capable of analyzing dry bulb, enthalpy and air quality inputs. An output from the economizer module will position the mixing box dampers to provide energy saving through the introduction of outside air for free cooling.

Discharge Plenum

Plenums shall mount on top of the evaporator section, with fans arranged for vertical discharge. Double deflection grills shall allow air discharge in multiple directions.

NOTES

NOTES

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